

# Enhanced Honey Cipher Structure with Multiple Cipher Structures

<sup>1</sup>M.RAMBABU, <sup>2</sup>N. Ramana, <sup>3</sup>Dr. M. Sadanandam

<sup>1</sup>M.Tech, Associate professor, <sup>2</sup>M.Tech,(Ph.D) Asst.Professor, <sup>3</sup>M.Tech, Ph.D, Assoc.Professor

<sup>1</sup>Department of Computer Science and Engineering, <sup>2</sup>Department of Computer Science and Engineering,

<sup>3</sup>Department of Computer Science and Engineering

<sup>1</sup>KG Reddy College of Engineering and Technology, Hyderabad, <sup>2</sup>Kakatiya University, Warangal, Telangana, India,

<sup>3</sup>Kakatiya University, Warangal, Telangana, India

**ABSTRACT:** Cryptography is a method of storing and transmitting data in a particular form so that only those for whom it is intended can read and process it. Cryptography includes techniques such as microdots, merging words with images, and other ways to hide information in storage or transit. However, in today's computer-centric world, cryptography is most often associated with scrambling plaintext. Honey Cipher Structure is one of such secured techniques in cryptography. Honey Cipher structure is new model in to provide security for plaintext of alphabets as well as numeric's. In this paper I present multiple Equations with multiple cipher structures. When sender select any one, then the respective cipher structure is mapping with specified ASCII Decimal values, which is to print the ASCII Character symbol. Deferent equations are able to mapping with different ASCII decimal values through HCS cipher structure. The three numbered text is converted into ASCII characters, these characters are to be considered as a cipher text. This cipher text is transferred to receiver. Receiver decrypts this cipher text in reverse order to read the original message.

**Keywords:** Honey Structure, Honey Cipher Structure, ASCII Values, ASCII Character Representation.

## 1. INTRODUCTION

Cryptography is a method of storing and transmitting data in a particular form so that only those for whom it is intended can read and process it. Cryptography includes techniques such as microdots, merging words with images, and other ways to hide information in storage or transit. However, in today's computer-centric world, cryptography is most often associated with scrambling plaintext. Honey Cipher Structure is one of the secured techniques in cryptography. This is the new technique in the cryptography; the technique is converting the plain text into cipher text. Some of the techniques convert only characters, but this structure converts numeric's (0,1,2,3,4,5,6,7,8,9) along with the alphabets. The creation of the password includes mixed texts. This created password is filled in the first row of the honey form, the repeated characters are omitted and fill next character in the password, and after filling the password uncovered characters are filled in the rest of the levels [2]. Do the same process for numerics also. After reaching the last level. Generated expression is convert this honey form into honey cipher structure. This structure is associated with Ascii Table. In this Ascii Table Ascii values are converted into Ascii Characters. These Ascii Characters are known as cipher text [7].

There are many structures available in security, ours is a new model to provide security for the alphabets as well as numeric's. In this problem, structure contains eight levels, from first level to last level one element is decreased at each level and last level contains only one element. In this structure first level is filled by the password, the repeated characters in the password is omitted, password may contain numerics also. Same way rest of the alphabet characters starting from the first alphabet 'a' to z omitting the repeated alphabets are filled in remaining levels, this structure may contain numbers also, to produce the high security. The existing system is Honey cipher structure. In this structure cipher text size is larger than plaintext. This structure has single conversion from plain text to cipher text using method. Opponent can easily break the cipher text with multiple attempts.

Honey Cipher Structure is one of such secured techniques in cryptography. There are many structures available in security, Honey Cipher structure is new model in to provide security for plaintext of alphabets as well as numeric's. In this paper I present multiple Equations with multiple cipher structures. When sender select any one, then the respective cipher structure is mapping with specified ASCII Decimal values, which is to print the ASCII Character symbol. Deferent equations are able to mapping with different ASCII decimal values through HCS cipher structure. In this problem I have converted plaintext in three ways, honey structure to cipher structure and this cipher text contain values this values are converted into character representation. I planned to print the cipher from character depending on precedence, because character contain two digit text, from these two I applied precedence.

## 2. LITERATURE SURVEY

Now a day's security is most popular in internet world, from a long time, Fiestal cipher structure, Ceaser cipher structure, DES, AES, etc. Methods are used to protect the information [1]. Honey Cipher Structure is also one of the techniques in cryptography, in this model we can convert only alphabets, numeric's are transferred in the same way. Attacker can capture and come to know that, displayed text may be original, like, phone numbers, home Address, something true. Except character conversion remaining all the text is not converted into the cipher text. Once a person's physical safety needs are relatively satisfied, the safety needs take precedence and dominate behavior. In the absence of physical safety – due to war, natural disaster, family violence, childhood abuse, etc. people may experience post-traumatic stress disorder or trans generational trauma. In the absence of economic safety (money count also not encrypted) [3]. Due to economic crisis and lack of work opportunities these safety needs manifest themselves in ways such as a preference for job security, grievance procedures for protecting the individual from unilateral authority, savings accounts, insurance policies, disability accommodations, etc.

## 3. THE PROPOSED SYSTEM

### Honey Structure:-

This honey cipher can reveal the apparent address of the abuse and provide bulk spam capture (which enables operators to determine spammers' response mechanisms). For open relay honey cipher, it is possible to determine the e-mail addresses ("drop boxes") spammers' use as targets for their test messages, which are the tools they use to detect open relays. It is then simple to deceive the spammer: transmit any illicit relay e-mail received addressed to that drop box e-mail address. That tells the spammer the honey cipher is a genuine abusable open relay, and they often respond by sending large quantities of relay spam to that honey cipher which stops it. The apparent source may be another abused system spammers and other abusers may use a chain of abused systems to make detection of the original starting point of the abuse traffic difficult.

This in itself is indicative of the power of honey cipher as anti-spam tools. In the early days of anti-spam honey cipher, spammers, with little concern for hiding their location, felt safe testing for vulnerabilities and sending spam directly from their own systems [5]. Honey cipher made the abuse riskier and more difficult. Spam still flows through open relays, while most spam originates in the spammers hop through open relays across political boundaries to mask their origin. Honey cipher operators may use intercepted relay tests to recognize and thwart attempts to relay spam through their honey cipher. "Thwart" may mean "accept the relay spam but decline to deliver it." honey cipher operators may discover other details concerning the spam and the spammer by examining the captured spam messages.

In modern removable frame hives the nursery area is in the brood chamber, which beekeepers prefer to be in the bottom box. In the late winter and early spring as the brood cycle begins, the queen starts to lay eggs within the winter cluster in proximity to available honey stores. Honey bees tend to greatly expand the brood chamber as the season progresses. The relative location of the brood chamber within the beehive may also change as bee keepers add more boxes or as wild bees build fresh comb into available cavities. Some beekeepers ensure that the queen will not go into the upper boxes (called supers or honey supers) by placing a screen called a queen excluder between the boxes. The screen has precisely measured open spaces through which a worker bee can pass, but not a queen. Some beekeepers do not use excluders, but try to keep the queen within the intended brood area by keeping a honey barrier of capped honey, which the queen is reluctant to cross, above the brood. In feral hives the honey bees tend to put the brood at bottom center of the cavity, and honey to the sides and above the brood, so beekeepers are trying to follow the natural tendency of the bees.

In areas where the climate is mild, one frame may be sufficient to start a new colony, with an added queen. But usually two to three frames are used, together with a frame that is predominantly honey. This ensures that there will be enough adult bees to provide the brood the adequate temperature and sufficient feed if there are a few rainy days when bees cannot gather nectar. If there are not enough adult bees to warm the combs, the brood may die from cold temperature overnight (aptly called "chilled brood").

## OBJECTIVES

- To gain new understanding of cryptographic models and techniques, in order to face current and future security challenges.
- To consolidate and strengthen the scientific excellence of cryptography using honey cipher
- It is not possible to hacking, it is multi way translation to convert the security
- Cryptography security system is to protect information resources at less cost than the value of the information that is being protected.
- Determining acceptable costs involves weighing the cost of the security versus the benefits of the security.
- It is translate single form of text into multiple structures.
- If the hacker hacking this he cannot find the Original honey form.
- There are multiple structures are generated from the single honey structures.
- Equation is converting the honey structure characters into hexadecimal characters.
- These hexadecimal characters are associated with ASCCII character symbols.
- These ASCII Character Symbols are received by the receiver as a cipher teat

## METHODOLOGY

When we create the honey structured form, and convert into honey cipher structure. This Cipher structure follows the two digits number this is called as honey cipher structure. This cipher structure values are consider as ASCII decimal values, this ASCII values are converted into character representation. This ASCII character representation is associated with character symbol; this symbol is considered as a cipher text. this way we can produce the full cipher structure, which is send to receiver. Receiver deciphers this in reverse order to get plain text, which is send by sender. This message received by receiver is based on the structure we have selected. Different structures are present different ciphers.

## 4. IMPLEMENTATION

This is the new technique in the cryptography; the technique is converting the plain text into cipher text. Some of the techniques convert only characters, but this structure converts numeric's (0,1,2,3,4,5,6,7,8,9) along with the alphabets. There are many structures available in security, ours is a new model to provide security for the alphabets as well as numeric's. In this problem, structure contains eight levels, from first level to last level one element is decreased at each level and last level contains only one element. In this structure first level is filled by the password, the repeated characters in the password is omitted, password may contain numeric's also. Same way rest of the alphabet characters starting from the first alphabet 'a' to z omitting the repeated alphabets are filled in remaining levels, this structure may contain numbers also, to produce the high security. The creation of the password includes mixed texts. This created password is filled in the first row of the honey form, the repeated characters are omitted and fill next character in the password, and after filling the password uncovered characters are filled in the rest of the levels. Do the same process for numeric also. After reaching the last level. Generated expression is convert this honey form into honey cipher structure. This structure is associated with ASCII Table in this ASCII table ASCII values are convert into ASCII Characters. These ASCII Character symbols are known as cipher text.

### Honey Structure:-

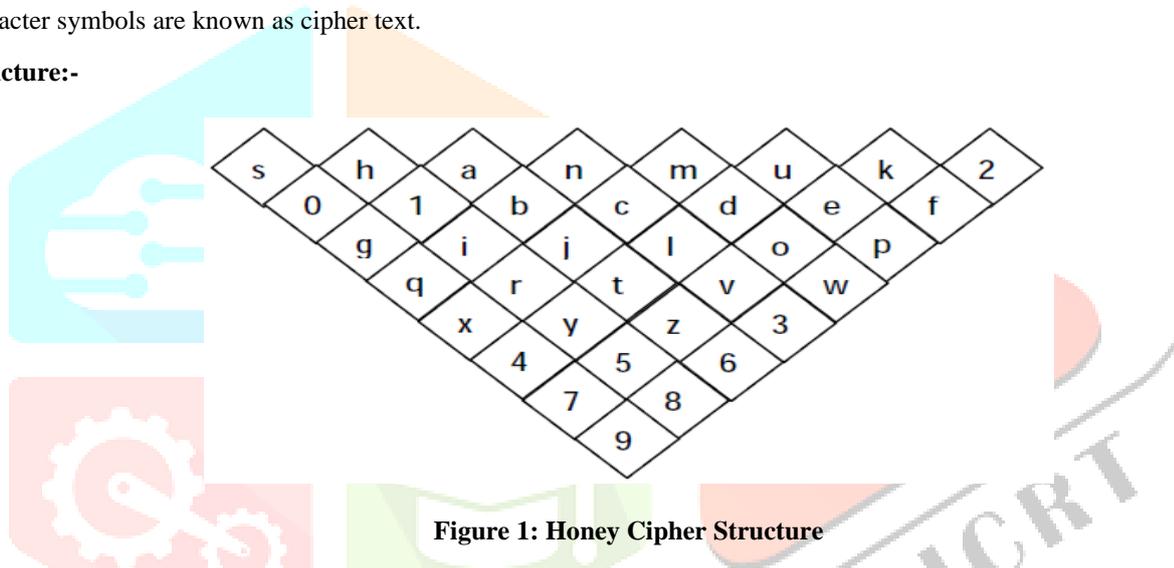


Figure 1: Honey Cipher Structure

In this paper, we have created the password, "Shanmukh2010", here h and 0 are repeated twice, the repeated characters in this password are omitted and follows the next characters [2]. Finally the filled password in this honey structure is "shanmuk201". This password is filled in the first level, and follows second level if not sufficient in the first level. After filling the password, remaining levels filled by the remaining characters. Finally fill the numeric's also to provide the security for home address. Whenever we create the structure, this structure specifies the all characters and numerics. I planned to convert this structure in decimal numbers by creating the honey equation. Implementation of the honey cipher structure it contains eight levels, each level represents with elements. The structure of first level indicates eight elements, second level indicates seven elements, and sixth level indicates six elements, and so on. From first level to last level one element is decreased at each level. The levels are represented with "i" and elements are represented with "j", this structure is mapping with the ASCII table, the importance of mapping with this table is that hexadecimal values are converted into character symbols. These character symbols are known as cipher text, this cipher text is considered as honey cipher text which is sent to receiver. This cipher is protected message. This is my paper to convert original message into cipher text in easiest method. Generated equation for the honey structure into honey cipher structure is here  $H_{i,j}$ , the levels and elements of honey structure respectively,

### Multiple Equations for Honey Cipher Structure

This formulas are created for convert the honey structures into honey cipher structure[7], and create the three digit number this is first stage of security but it contain three bit text for each honey character. These five equations are creating five different honey cipher structures. In this paper I provide more security to same specified plain text. In security bit cipher is the better for perfect security [1]. All the levels and all the elements in honey cipher structure are three digits number only, because two digits number are associated with the ASCII table, some of the elements are specified two character symbols. But in cipher structure is bit cipher or stream cipher. This paper implemented in bit cipher, so each honey structure characters are must print only one bit cipher character. In ASCII three digits of decimal values are only associated with the one bit of cipher text from ASCII character symbols.

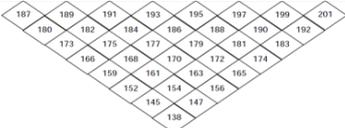
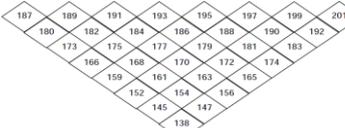
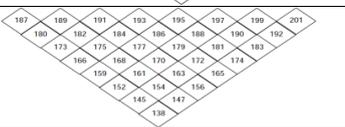
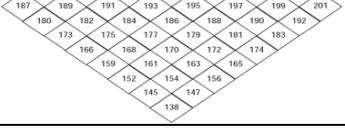
In this proposal sender can select any one of the structure to send his original message. The selected structure is associated with appropriate structure which is created or generated from the honey Structure. This honey structure is singleton. This is single structure will associated with

multiple Honey Cipher Structures, different cipher structures are specified with different form, based on the form this numeric numbers, it will communicate with respective symbol in the ASCII Table. User required selecting any one structure

|   |                             |                         |
|---|-----------------------------|-------------------------|
| ○ | $H_{ij} = 192 + 2*j - 7*i;$ | HONEY CIPHER STRUCUTRE1 |
| ● | $H_{ij} = 128 + 3j - 7*i$   | HONEY CIPHER STRUCUTRE2 |
| ○ | $H_{ij} = 64 + 2j - i^2$    | HONEY CIPHER STRUCUTRE3 |
| ○ | $H_{ij} = 185 + j^2 - 7*i$  | HONEY CIPHER STRUCUTRE4 |
| ○ | $H_{ij} = 255 - 3j - 7*i$   | HONEY CIPHER STRUCUTRE5 |

**Multiple Honey Cipher Structures:-**

The purpose of this paper is to provide a quick reference for ASCII translation [8]. This document and the links to other documents are intended to provide a greater awareness of the Data Management and Application Processing alternatives. The documentation and software were developed and tested on systems that are configured for an environment based on the hardware, operating systems, user requirements and security requirements. Therefore, adjustments may be needed to execute the jobs and programs when transferred to a system of a different architecture or configuration. Services have experience in moving or sharing data or application processing across a variety of systems. Preparing the application programs will require the transfer of source members that will be compiled and deployed on the target platform. The data will need to be transferred between the systems and may need to be converted and validated at various stages within the process. Has the technology, services and experience to assist in the application and data management tasks involved with doing business in a multi-system environment.

|   |   |
|---|---|
| ○ |  |
| ● |  |
| ○ |  |
| ○ |  |
| ○ |  |

## 5. CONCLUSION

This paper presents conversation from ASCII values to ASCII character symbols, these character symbols are known as cipher text. Decryption is very easy to reconvert cipher text to plain text. Here we specify multiple structures to provide perfect security. I also can say that if they have a proposal that, other than ASCII, if this honey cipher structure is associated with any other algorithms in security, an opponent cannot guess the plain text. If we create any secure table in database with more complicated and tough guessing. So we can protect plaintext from an opponent and can transfer messages with confidentiality.

## 6. ACKNOWLEDGEMENT

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## 8. AUTHOR'S PROFILE



Mr. M.Rambabu received M.Tech in Software Engineering from Rammappa Engineering College, Warangal, Affiliated by JNTUH. Worked in various engineering colleges and attained 9 years of experience. He guided various projects at UG & PG level and published 9 no's international and national journals. And he was contribute as a reviewer in WEEF-2017 at Malaysia. He was Teaching Assistance in IUCEE\_EPICE as Grading Reviewer. Presently working as an Associate Professor, in K G Reddy College of Engineering and Technology. His research interests include: Information Security, Computer Networks, Software Engineering.



N. RAMANA, Assistant professor in Dept. of Computer Science & Engineering, Kakatiya University, Warangal, Telangana, He received B.TECH (Electronics & Instrumentation) from KITS Warangal in 2000. He received M.Tech (Computer Science and Engineering) from JNTU, Kakinada in 2002. He worked in various capacities in academics and administration at Kakatiya University, and has 14 years of experience in Teaching. He guided various projects at UG & PG level and published papers in international, national journals. Area of Research work Data mining and predictive analytics. His interested areas are Internet of Things and Collaborative Learning Practicess in Engineering Education Transformation.



Dr. M. Sadanandam, Assoc.Professor and Chairman, Board of Studies, Dept. of Computer Science & Engineering, Kakatiya University, Warangal, Telangana, He received B.TECH [CSE] from University College of Engineering, Kakatiya University. M.Tech [CSE] from JNTUH, Hyderabad, and He was awarded Ph.D (Speech Recognition), from JNTUH, Hyderabad,. He worked in various capacities in Kakatiya University and attained 12+ years of experience. He is the Member on the panel of Examiners for Masters courses of JNTU University and Kakatiya University. He guided various projects at UG & PG level and published 23 no's international, national journals and National Conferences. His interested areas are Data structures, Speech Recognition and Processing, Image processing and Patternrecognition.

