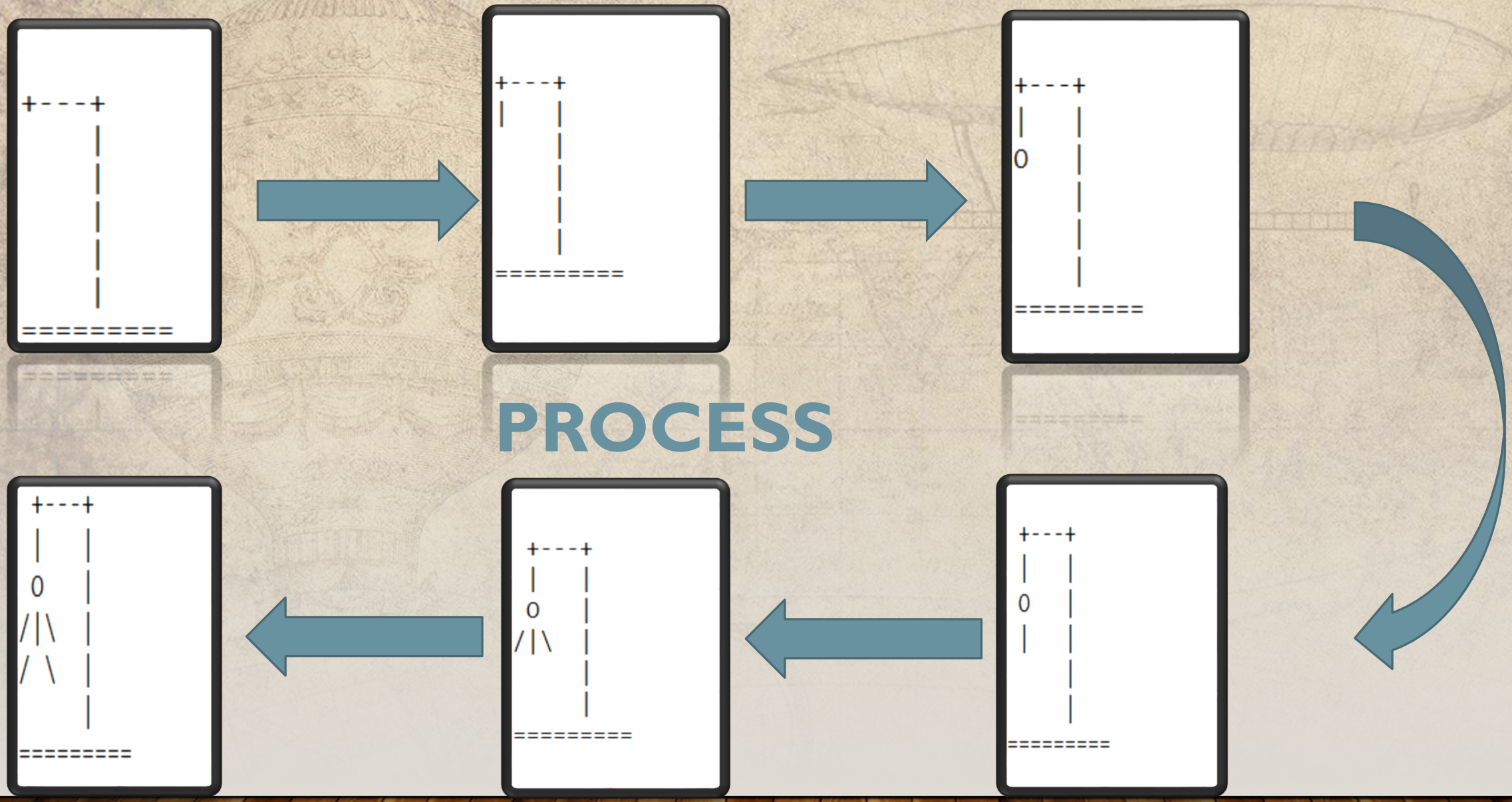
COMPUTER PROGRAMMING

INNOVATIVE ASSIGNMENT

TOPIC : THE HANGMAN GAME

INTRODUCTION :

- Hangman is a paper and pencil word guessing game for two or more players. One player chooses a word , phrase or sentence and the others tries to guess it by suggesting letters within a certain number of guesses.


PROCESS

THE EXECUTION PART

- Since there's only 1 human player and the other one is computer itself, so the code will choose a word from word_lib array, and how it will work? It will get a random int from certain range (ranging from 0 to number of words) using rand() function.
- rand() function usually returns same int everytime, it requires a 'seed' to return totally random int; we're giving time as a seed so it will return totally random int everytime.

- After getting random int; we'll use it as a index for word_lib array, we'll get the nth array member (n is random int which is returned by rand() function).

- Code will now save the random word in string (char *RandomWordIs), now it will listen for the char inputs by the user. Inputs will be stored 'char guess' variable.

- Since user is given 5 chances for 5 character word, we will use a loop and get 5 inputs from the user and we will compare it with the nth letter of the word (e.g if the random word is "hello", code will listen for the letter "h" for the first loop. After getting any input, it will check either the input is matching to the nth letter of the word or not, if its matching it will print "right guess" else "wrong guess" and will also print a ASCII art of hangman corresponding to your left chances).

- Program will also increment nth element of the letter, likewise program will also reduce your left chances if your guess is not matching with the nth character of the word.

- The same thing will happen till the last loop, which will be listening for the last character, if the last guess is correct, program will announce user as the winner, else he will lose.

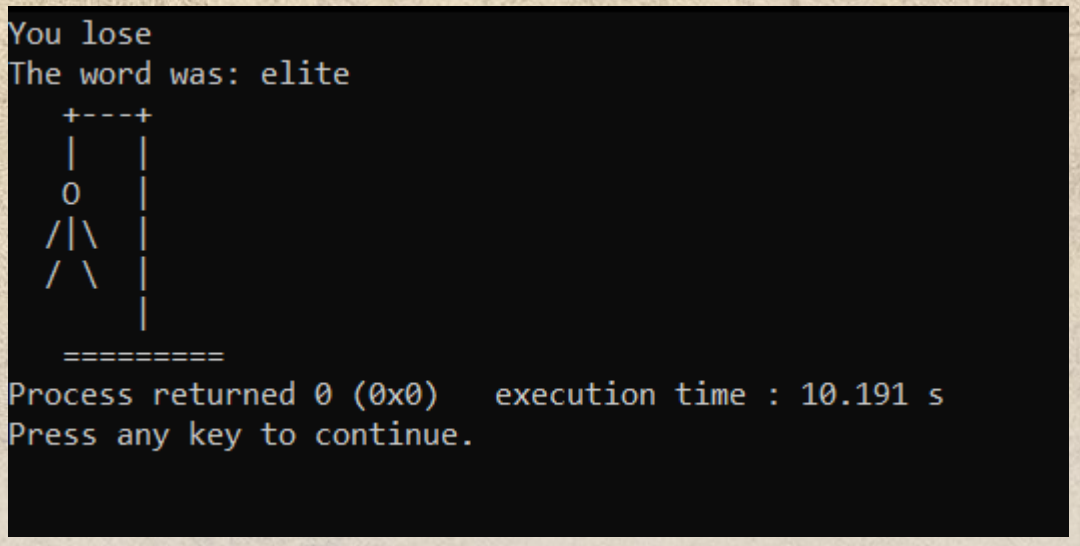
OUTPUT :

```
Hi, Welcome to Hangman game; try guessing the first letter out of 5 letters
Possible words----> hello, funny, throw, catch, elite, extra
GUESS THE LETTER(remaining chances- 5): g
wrong guess
   +---+
   |   |
       |
       |
       |
       |
       |
   =========
GUESS THE LETTER(remaining chances- 4):
```

```
Hi, Welcome to Hangman game; try guessing the first letter out of 5 letters
Possible words----> hello, funny, throw, catch, elite, extra
GUESS THE LETTER(remaining chances- 5): g
wrong guess
   +---+
   |   |
       |
       |
       |
       |
       |
   =========
GUESS THE LETTER(remaining chances- 4): u
wrong guess
   +---+
   |   |
   O   |
       |
       |
       |
       |
   =========
GUESS THE LETTER(remaining chances- 3): p
wrong guess
   +---+
   |   |
   O   |
   |   |
       |
       |
       |
   =========
GUESS THE LETTER(remaining chances- 2):
```

```
Hi, Welcome to Hangman game; try guessing the first letter out of 5 letters
Possible words----> hello, funny, throw, catch, elite, extra
GUESS THE LETTER(remaining chances- 5): g
wrong guess
   +---+
   |   |
       |
       |
       |
       |
       |
   =========
GUESS THE LETTER(remaining chances- 4): u
wrong guess
   +---+
   |   |
   O   |
       |
       |
       |
       |
   =========
GUESS THE LETTER(remaining chances- 3):
```

```
Hi, Welcome to Hangman game; try guessing the first letter out of 5 letters
Possible words----> hello, funny, throw, catch, elite, extra
GUESS THE LETTER(remaining chances- 5): g
wrong guess
   +---+
   |   |
       |
       |
       |
       |
       |
   =========
GUESS THE LETTER(remaining chances- 4): u
wrong guess
   +---+
   |   |
   O   |
       |
       |
       |
       |
   =========
GUESS THE LETTER(remaining chances- 3): p
wrong guess
   +---+
   |   |
   O   |
   |   |
       |
       |
       |
   =========
GUESS THE LETTER(remaining chances- 2): t
wrong guess
   +---+
   |   |
   O   |
  /|\  |
       |
       |
       |
   =========
GUESS THE LETTER(remaining chances- 1):
```


You lose
The word was: elite
+---+
| |
O |
/|\ |
/ \ |
|
=========
Process returned 0 (0x0)   execution time : 10.191 s
Press any key to continue.

THANK YOU

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