

# **TITLE PAGE**

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**Semester Project:**

**Hangman Game in C**

**PAKISTAN INSTITUTE OF  
ENGINEERING AND APPLIED  
SCIENCES  
(PIEAS)**

# Project Report

## Abstract

This is a simple Hangman Game using C Programming Language. We use this Game as a small project to boost our programming skills and understanding logic. The Hangman program randomly selects a secret word from a provided word list. A Hangman Game is about guessing letters to form the words. The word to guess is represented by a row of dashes representing each letter of the word. If the player guesses the right letter that is within the word, the letter appears at its correct position. The user has to guess the correct word until a man is hung. If the user does not guess the correct word, then a man is hung and game is over.

## Implementation and Results

Snapshots taken from successful runs of the project code.

### Snapshot 1.0 (Output Screen)

```

                                     Welcome to Hangman

Rules :
- This game is case-sensitive.
- Maximum 6 tries are allowed.
- First letter of word is upper-case. Remainings are lower-case.
- No space is included.
- Big Hint- Word is one of the names of our class-fellows.

Let's Play:

+---+
|
|
|
|
|
|
|
=====
Word: _ _ _ _ _
Enter a letter:
```

### Snapshot 1.1 (true case)

```
Enter a letter: l
Good guess.

+---+
|   |
|   |
|   |
|   |
+---+

=====

Word: _ _ _ l l _ _
Enter a letter:
```

### Snapshot 1.2 (false case)

```
Enter a letter: r
Incorrect guess. Tries left: 4

+---+
|   |
|   |
|   |
|   |
+---+

=====

Word: _ _ _ l l _ _
Enter a letter: _
```

### Snapshot 1.3 (true case)

```
Enter a letter: b
```

```
Good guess.
```

```
+---+
|   |
|   O
|   |
|   |
+---+
```

```
=====
```

```
Word: _ b _ _ l l _ _
```

```
Enter a letter:
```

### Snapshot 1.4 (false case)

```
Enter a letter: y
```

```
Incorrect guess. Tries left: 3
```

```
+---+
|   |
|   O
|  /|
|   |
+---+
```

```
=====
```

```
Word: _ b _ _ l l _ _
```

```
Enter a letter:
```

### Snapshot 1.5 (false case)

```
Enter a letter: m
Incorrect guess. Tries left: 2

+---+
|   |
|   O
|  /|\
|
+---+

=====

Word: _ b _ _ l l _ _
Enter a letter: _
```

### Snapshot 1.6 (false case)

```
Enter a letter: c
Incorrect guess. Tries left: 1

+---+
|   |
|   O
|  /|\
|  /
+---+

=====

Word: _ b _ _ l l _ _
Enter a letter: _
```

### Snapshot 1.7 (true case)

```
Enter a letter: A
```

Good guess.

=====

Word: A b \_ \_ 1 1 \_ \_

```
Enter a letter: _
```

### Snapshot 1.8 (repeat case)

```
Enter a letter: r
```

You have already guessed 'r'. Please try another letter.

$$\begin{array}{c} + \quad - \quad - \quad + \\ | \qquad \qquad | \\ | \qquad \qquad 0 \\ | \qquad / \quad | \quad \backslash \\ | \qquad / \end{array}$$

=====

Word: A b \_ \_ l l \_ \_

```
Enter a letter: _
```

### Snapshot 1.9 (end case)

```
Enter a letter: s
Incorrect guess. Tries left: 0
Sorry, you have run out of tries. The word was: Abdullah
Now, You are fully hanged by a Hangman.
  +---+
  |   |
  |   O
  |  /|\
  |  / \
  |
=====
Would you like to play Hangman again?
Press 1 for Yes, 0 for No:
```

### Snapshot 1.10 (last case)

```
Would you like to play Hangman again?
Press 1 for Yes, 0 for No: 0

Thank you for playing Hangman.

-----
Process exited after 598.2 seconds with return value 0
Press any key to continue . . .
```

## **Conclusion**

In conclusion, Hangman is a traditional game, typically played with words. It's possible to play Category Hangman rather than guessing words, the player might guess names of cities, or athletes, or fictional characters, or Duke professors, or top forty song like titles. In simple, the list is endless. We wrote a program to play a "guess a word letter-by-letter" version of hangman as shown above.

The Game we presented is Case-Sensitive. Maximum 6 tries are allowed in one play. First letter of the word is upper-case. Remaining's are lower-case. No space is included in a guessed word. Big Hint- Word is one of the names of our classmates. If the user enters a word that is already guessed, then the program gives another free try without losing remaining's tries.

However, by little modification in a source code, we can make the game case-insensitive, change the word-list, change the allocation of tries, give different hints and so on. In simple, we can change the rules of the game and the ASCII Art of hangman game.