



**B.P. Poddar Institute Of  
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# Hangman Game

*A micro-project on 'C'*

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*It is a micro-project based on the 'Hangman Game' which has been originally coded in 'C' Language as per our course curriculum under the guidance of Mr. Subhadip Chandra Sir. It contains the source code which has been duly tested for its performance and accuracy on a programming language environment.*

*Dept. of ECE(B),  
First Year*

Date of Starting: 10<sup>th</sup> May, 2019

Date of Completion: 12<sup>th</sup> May, 2019

01

## Introduction

*The first and the foremost section defines the overall introduction of this micro-project containing the Algorithm, Source Code, Sample Outputs, Discussion & Acknowledgement. It reflects the working procedure, detailed description of our work and its outputs sequentially.*

02

## Algorithm

*This section holds the appropriate algorithm which we have put into work to finally produce the code for this program in a sophisticated way.*

03

## Source Code

*This section contains the original codes that have been designed by us on a 'C' Programming environment so as to successfully run this game on any proper coding platform.*

04

## Input & Output

*Here we have put up few possible and valid sample inputs & outputs which depicts the success of our micro-project.*

05

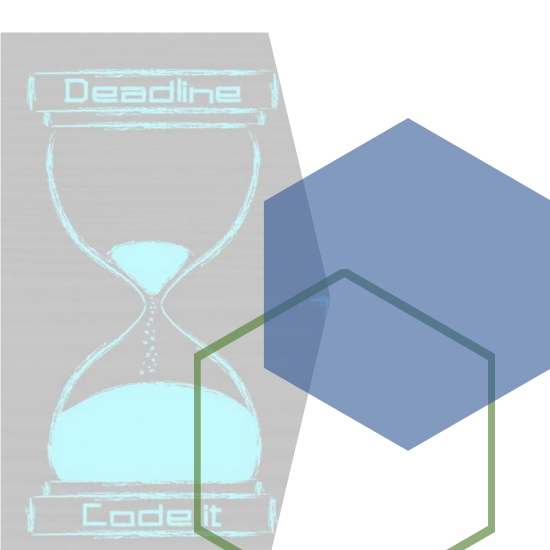
## Discussion

*We have discussed here what we finally achieve by doing this micro-project and what is its outcome. It explains the impact of Coding to the real world.*

06

## Acknowledgement

*Here we have finally expressed our gratitude and thanks to our respective project coordinator and guides who have extended their helping hands and shared their experiences in order to successfully complete this 'Hangman Game' project.*

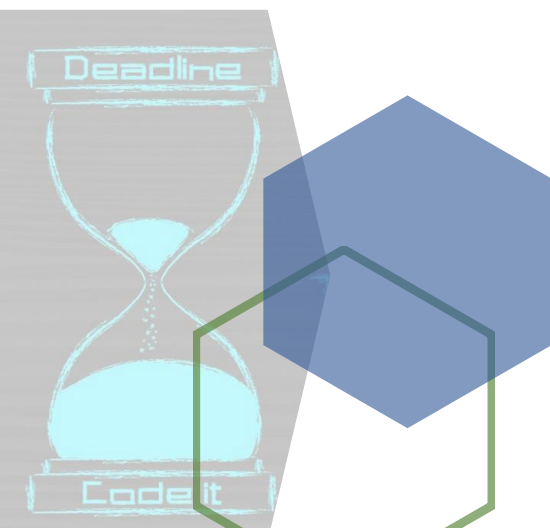


# Introduction

*It is a micro-project based on the '**Hangman Game**' which has been originally coded in 'C' Language as per our course curriculum under the guidance of Mr. Subhadip Chandra Sir. It contains the source code which has been duly tested for its performance and accuracy on a programming language environment. The Hangman Game is a very nice game to build the cognitive skills of people. It asks them to recollect their knowledge and think and try to answer correctly. It's a fun game and you can keep on playing until you know all the words.*

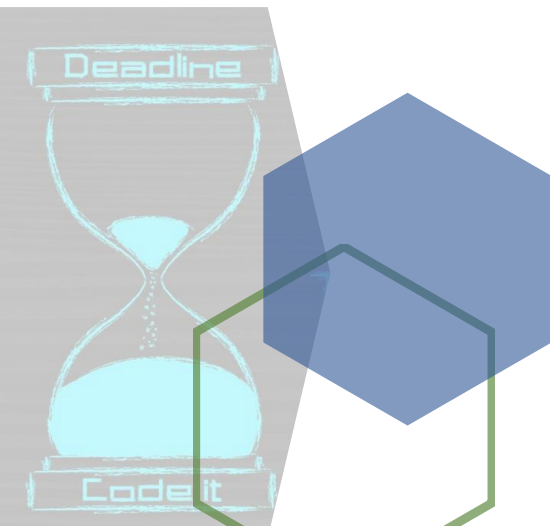
*Following sections of this project contains the Algorithm which describes the steps how we have formed it into proper codes to create the game. Then the Source Code has the original codes designed by us with proper indentation so as to make any reader understand it with a clear concept. Next follows the Input & Output, which contains sample test inputs and their respective outputs along with the screenshots.*

*We have also put up a small discussion about what we have learnt from this project and what does this project is trying to bring out and also what is its contribution to the educational as well as coding field.*



# Algorithm

- Step 01 *Take the choice from the user for which question he/she wants to play, category wise, or give an opportunity to the user for creating a puzzle on his/her own.*
- Step 02 *According to the choice, give out the hint.*
- Step 03 *Give the user 3 chances to guess the word correctly letter by letter.*
- Step 04 *If the user fails to do so, display the correct word or else display the winning message.*
- Step 05 *Give a chance to the user to re-play the game.*



# Source Code

```
#include<stdio.h>
#include<stdlib.h>
#include<string.h>

int main()
{
    char ch='y';
    while(ch=='y' || ch=='Y')
    {
        char ans[100],alpha[100],display[100],name[100],s;
        int c=3,match=0,count=0,pos=0,w,length,i,ch;
        printf("Enter your Name : ");
        scanf("%[^\n]s",name);
        system("cls");
        printf("Hello %s !! \nYou are requested to choose any question topic of your
        choice from the options mentioned below\n",name);
        printf("\nPress 1 to Guess the Company's Name \nPress 2 to Guess the
        Flower's Name \nPress 3 to Guess the Bird's Name \nPress 4 to Guess the
        Animal's Name \nPress 5 to Guess the City's Name \nPress 6 for Custom
        Guess\n");
        printf("Enter your Choice : ");
        scanf("%d",&ch);
        switch(ch)
        {
            case 1:
            {
                strcpy(ans,"apple");
                system("cls");
                printf("Question : Guess Who ?\n");
                printf("\n[ Hint : It is an American multinational
                technology company headquartered in Cupertino, California, that designs,
                develops, and sells consumer electronics, computer software, and online
                services. It is considered one of the Big Four of technology along with
                Amazon, Google, and Facebook. ]\nPress Enter to Continue");
                getchar();
                break;
            }
            case 2:
            {
                strcpy(ans,"tulip");
                system("cls");
                printf("Question : Guess Who ?\n");
                printf("\n[ Hint : They form a genus of spring-blooming
                perennial herbaceous bulbiferous geophytes. The flowers are usually large,
                showy and brightly coloured, generally red, pink, yellow, or white. They
                often have a different coloured blotch at the base of the tepals,
                internally. ]\nPress Enter to Continue");
                getchar();
                break;
            }
        }
    }
}
```

```

case 3:
{
    strcpy(ans,"eagle");
    system("cls");
    printf("Question : Guess Who ?\n");
    printf("\n[ Hint : It is the common name for many
large birds of prey of the family Accipitridae. They belong to several
groups of genera, not all of which are closely related. Most of the 60
species of them are from Eurasia and Africa. ]\nPress Enter to
Continue");
    getchar();
    break;
}
case 4:
{
    strcpy(ans,"tiger");
    system("cls");
    printf("Question : Guess Who ?\n");
    printf("\n[ Hint : It is the largest species among
the Felidae and classified in the genus Panthera. It is most
recognizable for its dark vertical stripes on reddish-orange fur with a
lighter underside. It is an apex predator, primarily preying on
ungulates such as deer and bovids. ]\nPress Enter to Continue");
    getchar();
    break;
}
case 5:
{
    strcpy(ans,"mumbai");
    system("cls");
    printf("Question : Guess Who ?\n");
    printf("\n[ Hint : It is a densely populated city
on India's west coast. A financial center, it's India's largest city.
]\nPress Enter to Continue");
    getchar();
    break;
}
case 6:
{
    printf("\nEnter the Answer (in lower case only) : ");
    scanf("%s",ans);
    getchar();
    char hint[500];
    printf("\nNow, Enter your Hint : ");
    scanf("%[^\n]s",hint);
    getchar();
    system("cls");
    printf("Question : Guess Who ?\n");
    printf("\n[ Hint : %s ]\nPress Enter to
Continue",hint);
    break;
}
default:
    printf("Error !! Please enter a number between 1 to
6");}

```

```

getchar();
length=strlen(ans);
    printf("\n\nYou will get 3 chances to guess the right answer \nPress
Enter to Continue");
getchar();
    printf("\n\n\nThe word has %d alphabets\n",length);
    for(i=0;i<length;i++)
{
    display[i]='*';
    display[length]='\0';
}
    for(i=0;i<length;i++)
{
    printf(" ");
    printf("%c",display[i]);
}
while(c!=0)
{
    match=0;
    printf("\n\nEnter any alphabet from a to z : ");
    scanf("%c",&s);
    if(s<'a' || s>'z')
    {
        printf("\nWrong Input !! Please enter alphabet from a to z
Only");
        match=2;
    }

    if (match!=2)
    {
        for(count=0;count<length;count++)
        {
            if(s==ans[count])
            {
                match=1;
            }
        }
        if(match==0)
        {
            printf("\nWrong Guess !! You have %d tries left\n",--c);
            getchar();
        }
        else
        {
            for(count=0;count<length;count++)
            {
                match=0;
                if(s==ans[count])
                {
                    pos=count ;
                    match=1;
                }
            }
        }
    }
}

```

```

        if (match==1)
        {
            for (i=0;i<length;i++)
            {
                if (i==pos)
                {
                    display[i]=s;
                }
                else if (display[i]>='a'&&display[i]<='z')
                {
                    continue;
                }
                else
                {
                    display[i]='*';
                }
            }
            alpha[pos]=s;
            alpha[length]='\0';
            w=strcmp(alpha,ans);
            if (w==0)
            {
                printf("\nCongratulations !!");
                printf("\nYou made the right guess, the
Answer was : %s \n",ans);
                getchar();
            }
        }
    }
    }
    printf("\n");
    for (i=0;i<length;i++)
    {
        printf(" ");
        printf("%c",display[i]);
    }
    getchar();
}
if (c<=0)
{
    printf("\nSorry !!");
    printf("\nYou failed to guess the right answer, The Answer was:
%s \n",ans);
}
fflush(stdin);
printf("\n\nDo you want to Continue?(Y/N): ");
scanf("%c",&ch);
}
return 0;
}

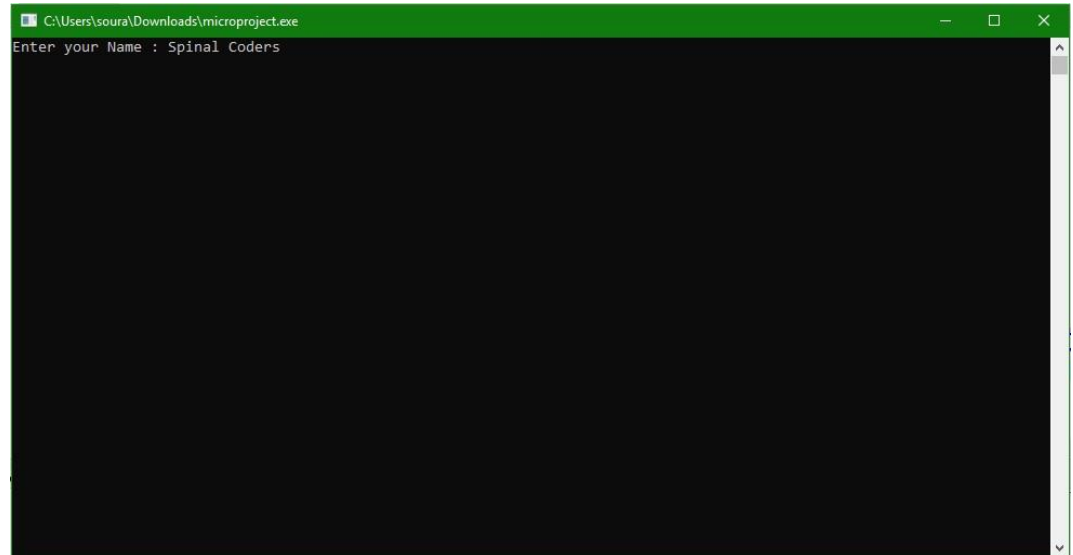
```



# Input & Output

01

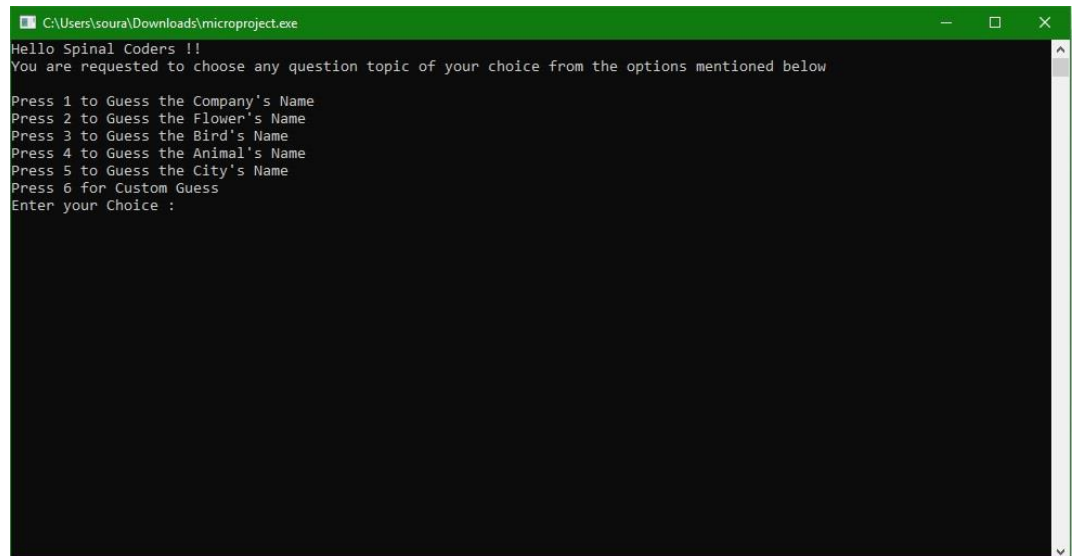
*Entering the Name*



```
C:\Users\soura\Downloads\microproject.exe
Enter your Name : Spinal Coders
```

02

*Displaying Options*

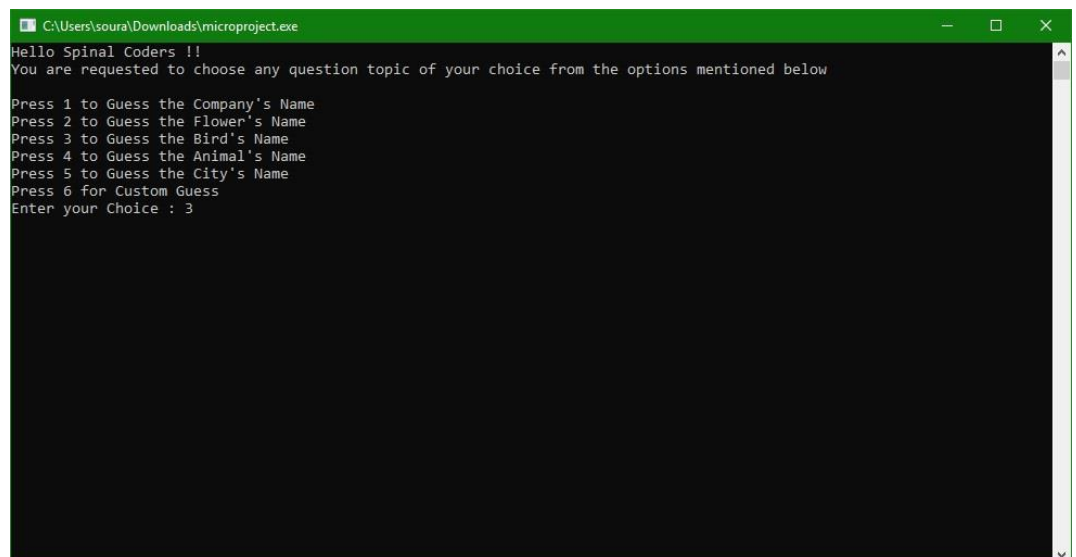


```
C:\Users\soura\Downloads\microproject.exe
Hello Spinal Coders !!
You are requested to choose any question topic of your choice from the options mentioned below

Press 1 to Guess the Company's Name
Press 2 to Guess the Flower's Name
Press 3 to Guess the Bird's Name
Press 4 to Guess the Animal's Name
Press 5 to Guess the City's Name
Press 6 for Custom Guess
Enter your Choice :
```

03

*Entering Choice*

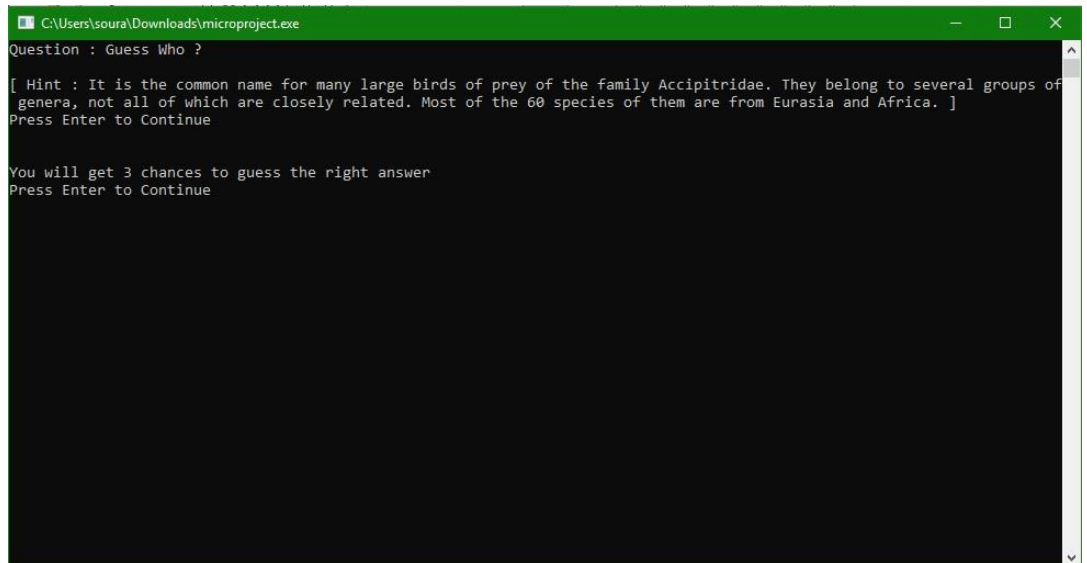


```
C:\Users\soura\Downloads\microproject.exe
Hello Spinal Coders !!
You are requested to choose any question topic of your choice from the options mentioned below

Press 1 to Guess the Company's Name
Press 2 to Guess the Flower's Name
Press 3 to Guess the Bird's Name
Press 4 to Guess the Animal's Name
Press 5 to Guess the City's Name
Press 6 for Custom Guess
Enter your Choice : 3
```

## 04

### *Displaying Hint*



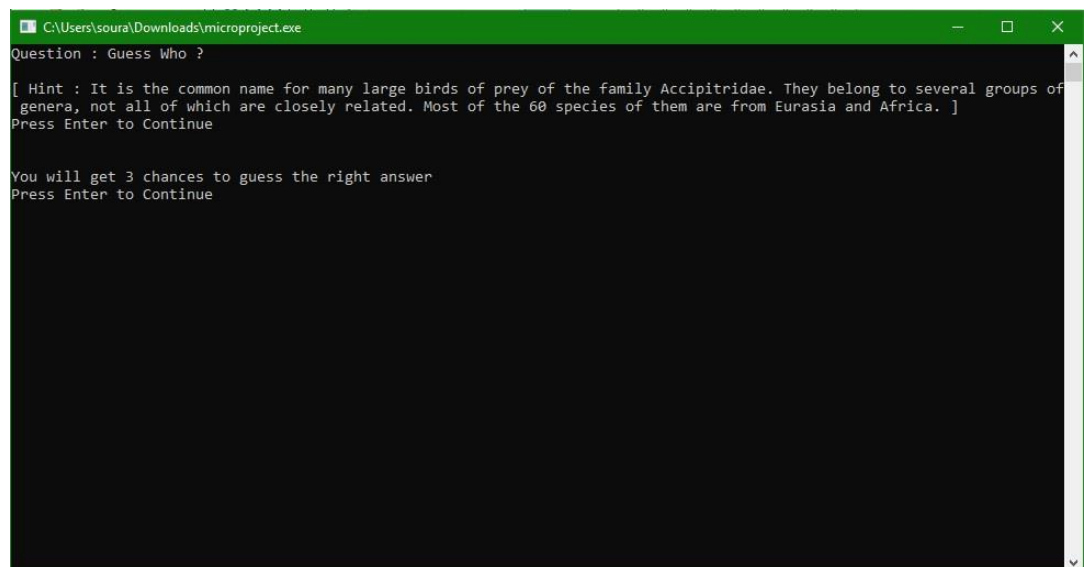
```
C:\Users\soura\Downloads\microproject.exe
Question : Guess Who ?

[ Hint : It is the common name for many large birds of prey of the family Accipitridae. They belong to several groups of
genera, not all of which are closely related. Most of the 60 species of them are from Eurasia and Africa. ]
Press Enter to Continue

You will get 3 chances to guess the right answer
Press Enter to Continue
```

## 05

### *Entering the First Guess*



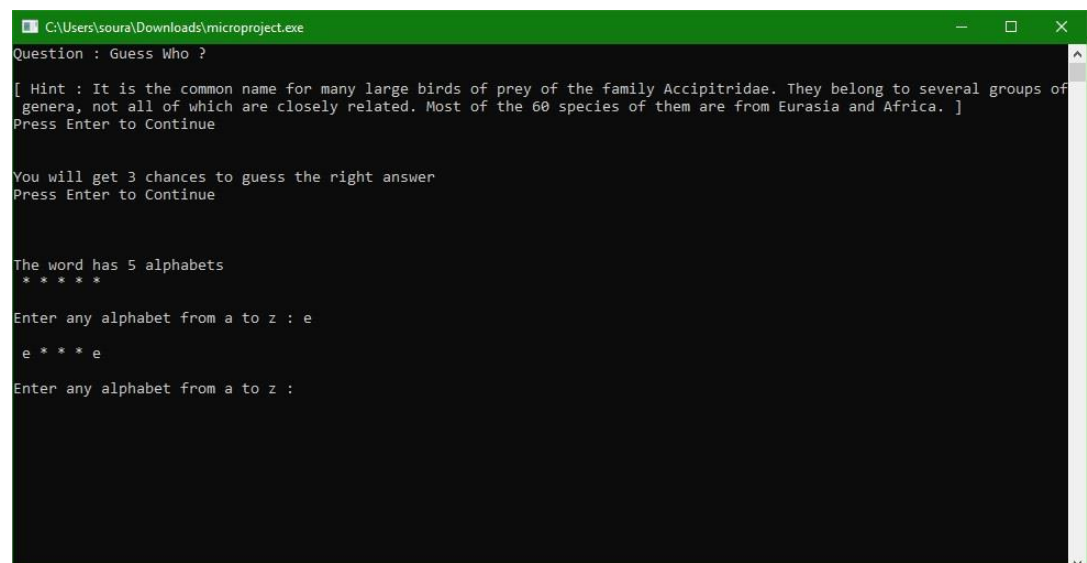
```
C:\Users\soura\Downloads\microproject.exe
Question : Guess Who ?

[ Hint : It is the common name for many large birds of prey of the family Accipitridae. They belong to several groups of
genera, not all of which are closely related. Most of the 60 species of them are from Eurasia and Africa. ]
Press Enter to Continue

You will get 3 chances to guess the right answer
Press Enter to Continue
```

## 06

### *Displaying the correctly guessed Alphabets*



```
C:\Users\soura\Downloads\microproject.exe
Question : Guess Who ?

[ Hint : It is the common name for many large birds of prey of the family Accipitridae. They belong to several groups of
genera, not all of which are closely related. Most of the 60 species of them are from Eurasia and Africa. ]
Press Enter to Continue

You will get 3 chances to guess the right answer
Press Enter to Continue

The word has 5 alphabets
*****

Enter any alphabet from a to z : e
e * * * e

Enter any alphabet from a to z :
```

07

*Entering the second choice and displaying matched Alphabets*

```

C:\Users\soura\Downloads\microproject.exe
Question : Guess Who ?

[ Hint : It is the common name for many large birds of prey of the family Accipitridae. They belong to several groups of genera, not all of which are closely related. Most of the 60 species of them are from Eurasia and Africa. ]
Press Enter to Continue

You will get 3 chances to guess the right answer
Press Enter to Continue

The word has 5 alphabets
* * * * *

Enter any alphabet from a to z : e

e * * * e

Enter any alphabet from a to z : a

e a * * e

Enter any alphabet from a to z : _

```

08

*Entering the third guess and showing the matched Alphabets*

```

C:\Users\soura\Downloads\microproject.exe
Question : Guess Who ?

[ Hint : It is the common name for many large birds of prey of the family Accipitridae. They belong to several groups of genera, not all of which are closely related. Most of the 60 species of them are from Eurasia and Africa. ]
Press Enter to Continue

You will get 3 chances to guess the right answer
Press Enter to Continue

The word has 5 alphabets
* * * * *

Enter any alphabet from a to z : e

e * * * e

Enter any alphabet from a to z : a

e a * * e

Enter any alphabet from a to z : g

e a g * e

Enter any alphabet from a to z :

```

09

*Entering the final guess and HURRAH!*

*We guessed the word correctly*

```

C:\Users\soura\Downloads\microproject.exe
genera, not all of which are closely related. Most of the 60 species of them are from Eurasia and Africa. ]
Press Enter to Continue

You will get 3 chances to guess the right answer
Press Enter to Continue

The word has 5 alphabets
* * * * *

Enter any alphabet from a to z : e

e * * * e

Enter any alphabet from a to z : a

e a * * e

Enter any alphabet from a to z : g

e a g * e

Enter any alphabet from a to z : l

Congratulations !!
You made the right guess, the Answer was : eagle

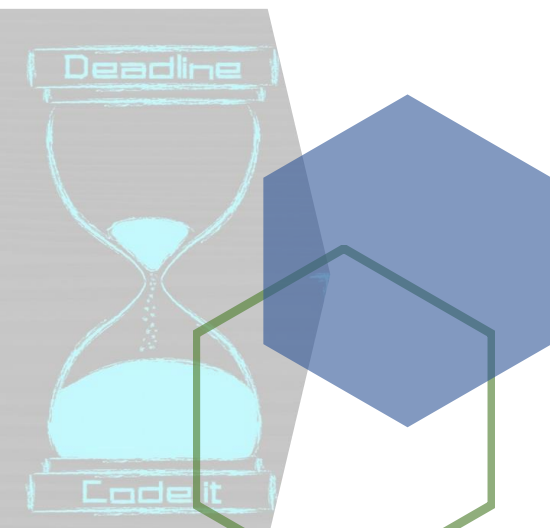
e a g l e_

```

# Discussion

*The Hangman Game is a very nice game to build the cognitive skills of people. It asks them to recollect their knowledge and think and try to answer correctly. It's a fun game and you can keep on playing until you know all the words.*

*Technically, we gained a lot of experience by designing this game. Our coding skills were enhanced and we enjoyed while making this project.*



# Acknowledgement

*The success and final outcome of this project required a lot of guidance and assistance from many people and we are extremely privileged to have got this all along the completion of our project. All that we have done is only due to such supervision and assistance and we would not forget to thank them.*

*I respect and thank Mr. Subhadip Chandra, for providing us an opportunity to do the project work and giving us all support and guidance which made us complete the project duly. We are extremely thankful to him for providing such a nice support and guidance, although he had busy schedule managing the college affairs. We owe our deep gratitude to our project guide, who took keen interest on our project work and guided us all along, till the completion of our project work by providing all the necessary information for developing the **'Hangman Game'**, based on 'C' programming language.*

*We are thankful to and fortunate enough to get constant encouragement, support and guidance from all Teaching staffs of Computer Science Dept. which helped us in successfully completing our project work. Also, we would like to extend our sincere esteems to all staff in laboratory for their timely support.*

*Yours sincerely,*

(Soumya Koley)

(Soubhik Maji)

(Shubhadeep Mandal)

*Date:*

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*Signature of Project Guide*

