



Green University of Bangladesh
Department of Computer Science and Engineering (CSE)
Faculty of Sciences and Engineering
Semester: (Summer, Year:2022), B.Sc. in CSE (Day)

Course Title: Structured Programming Lab

Course Code: CSE-104

Section: DC

Lab Report: 05

Student Details

Name		ID
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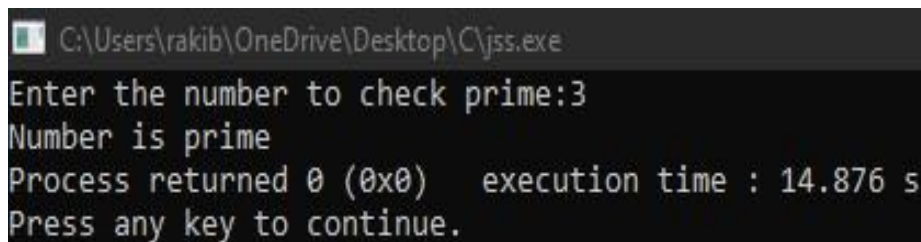
Course Teacher's Name : Monoshi Kumar Roy

Question: 01

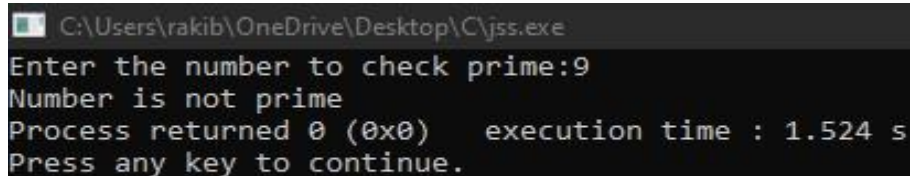
Write a C program to find whether a given number is a prime number or not.

Code:

```
#include<stdio.h>
int main(){
int n,i,m=0,f=0;
printf("Enter the number to check prime:");
scanf("%d",&n);
m=n/2;
for(i=2;i<=m;i++)
{
if(n%i==0)
{
printf("Number is not prime");
f=1;
break;
}
}
if(f==0)
printf("Number is prime");
return 0;
}
```



C:\Users\rakib\OneDrive\Desktop\C\jss.exe
Enter the number to check prime:3
Number is prime
Process returned 0 (0x0) execution time : 14.876 s
Press any key to continue.



C:\Users\rakib\OneDrive\Desktop\C\jss.exe
Enter the number to check prime:9
Number is not prime
Process returned 0 (0x0) execution time : 1.524 s
Press any key to continue.

Question: 02

Print Fibonacci series until a given number. For instance, if a user wants to print Fibonacci series until 1000, print all the Fibonacci number below 1000.

Code:

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

```
int main()
{
    int a, b, c, i, terms;
    printf("Enter number: ");
    scanf("%d", &terms);
    a = 0;
    b = 1;
    c = 0;
    printf("Fibonacci series: \n");
    for(i=1; i<=terms; i++)
    {
        printf("%d, ", c);

        a = b;
        b = c;
        c = a + b;
    }

    return 0;
}
```

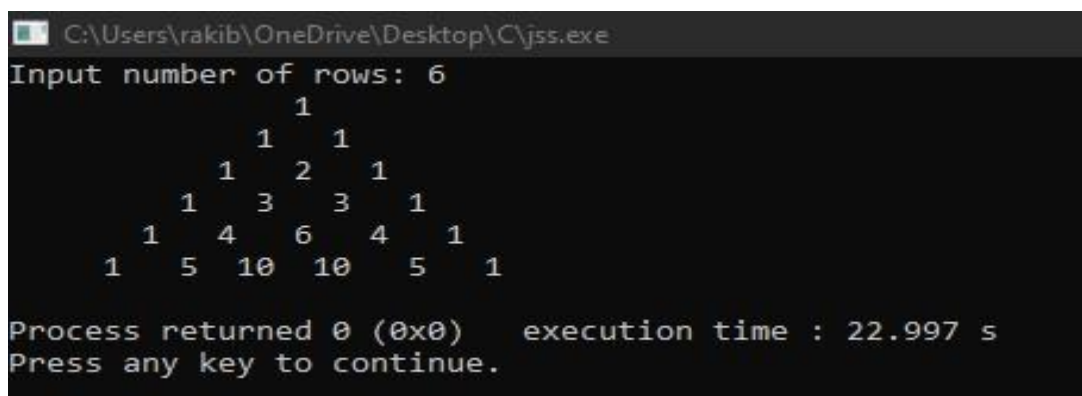
Question: 03

Display Pascal's Triangle until a given row. For instance, if a user selects row = 6, the pascal triangle for the choice would be something like below:

Code:

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

```
int main()
{
    int no_row,c=1,blk,i,j;
    printf("Input number of rows: ");
    scanf("%d",&no_row);
    for(i=0;i<no_row;i++)
    {
        for(blk=1;blk<=no_row-i;blk++)
            printf(" ");
        for(j=0;j<=i;j++)
        {
            if (j==0 || i==0)
                c=1;
            else
                c=c*(i-j+1)/j;
            printf("%4d",c);
        }
        printf("\n");
    }
}
```



The screenshot shows a Windows command prompt window titled "C:\Users\rakib\OneDrive\Desktop\C\jss.exe". The program prompts the user to "Input number of rows: 6". It then displays Pascal's Triangle for 6 rows. The numbers are formatted with a width of 4 characters. At the bottom, it shows "Process returned 0 (0x0) execution time : 22.997 s" and "Press any key to continue."

```
C:\Users\rakib\OneDrive\Desktop\C\jss.exe
Input number of rows: 6
      1
     1 1
    1 2 1
   1 3 3 1
  1 4 6 4 1
 1 5 10 10 5 1

Process returned 0 (0x0)   execution time : 22.997 s
Press any key to continue.
```