

ABDUL MOIZ AKRAM

455987

ME-15-C

## QUESTION 1

```
#include<iostream>
```

```
using namespace std;
```

```
int main (){
```

```
    int a=1;
```

```
    for(int count=1; count<=10; count++){
```

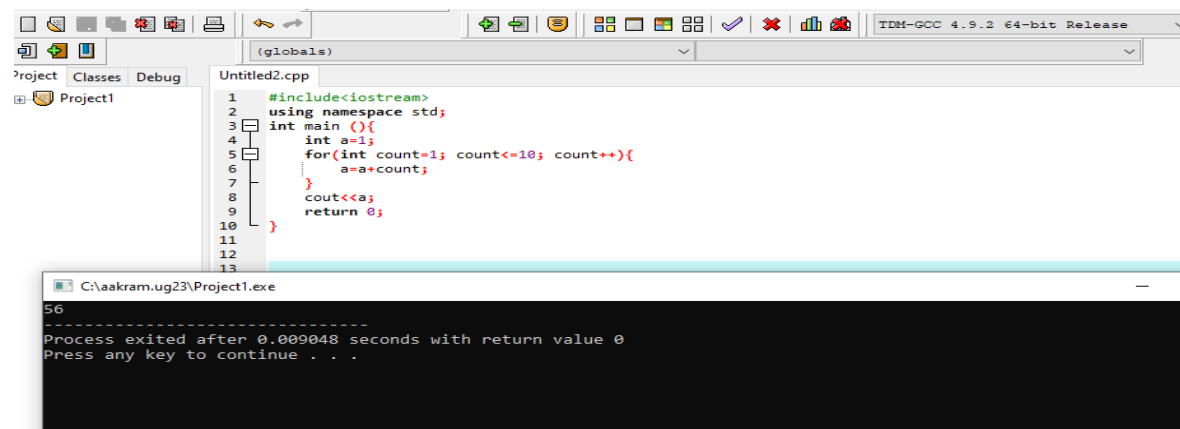
```
        a=a+count;
```

```
    }
```

```
    cout<<a;
```

```
    return 0;
```

```
}
```



## QUESTION 02

```
#include<iostream>

using namespace std;

int main (){

    int a, product;

    cout<<"enter the number you desire as a output";

    cin>>a;

    for(int i=1; i<=10; i++){

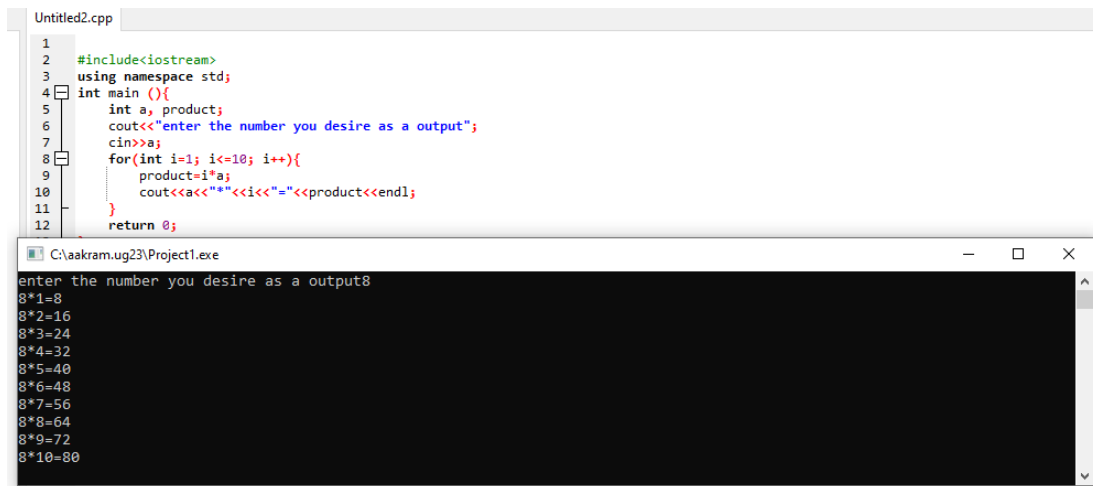
        product=i*a;

        cout<<a<<"*"<<i<<"="<<product<<endl;

    }

    return 0;

}
```



The screenshot displays a C++ IDE with two windows. The top window, titled 'Untitled2.cpp', shows the source code for a program that calculates the product of a user-input number and integers from 1 to 10. The code is as follows:

```
1 #include<iostream>
2 using namespace std;
3
4 int main (){
5     int a, product;
6     cout<<"enter the number you desire as a output";
7     cin>>a;
8     for(int i=1; i<=10; i++){
9         product=i*a;
10        cout<<a<<"*"<<i<<"="<<product<<endl;
11    }
12    return 0;
13 }
```

The bottom window, titled 'C:\aakram.ug23\Project1.exe', shows the program's execution. It prompts the user to 'enter the number you desire as a output' and displays the results of the calculations for the input value 8:

```
enter the number you desire as a output8
8*1=8
8*2=16
8*3=24
8*4=32
8*5=40
8*6=48
8*7=56
8*8=64
8*9=72
8*10=80
```

### QUESTION 03

```
#include<iostream>

using namespace std;

int main (){

    int a, factorial=1;

    cout<<"enter number to get its factorial:";

    cin>>a;

    for(int num=1; num<=a; num++)

    {

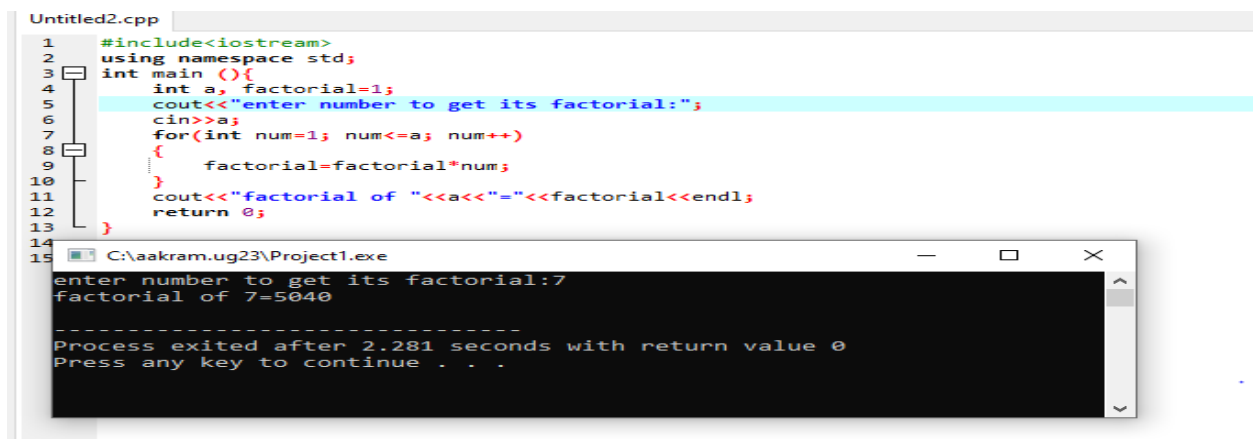
        factorial=factorial*num;

    }

    cout<<"factorial of "<<a<<"="<<factorial<<endl;

    return 0;

}
```



The screenshot shows a C++ IDE with a file named 'Untitled2.cpp'. The code is as follows:

```
1  #include<iostream>
2  using namespace std;
3  int main (){
4      int a, factorial=1;
5      cout<<"enter number to get its factorial:";
6      cin>>a;
7      for(int num=1; num<=a; num++)
8      {
9          factorial=factorial*num;
10     }
11     cout<<"factorial of "<<a<<"="<<factorial<<endl;
12     return 0;
13 }
```

Below the code editor, a console window titled 'C:\aakram.ug23\Project1.exe' shows the program's execution. It prompts the user to enter a number, and the user enters 7. The output is 'factorial of 7=5040'. The console also displays the message 'Process exited after 2.281 seconds with return value 0' and 'Press any key to continue . . .'. The line numbers 14 and 15 are visible in the left margin of the code editor.

#### QUESTION 04

```
#include<iostream>

using namespace std;

int main(){

    int a=3, b=5, c, i, o;

    cout<<"enter the number of elements you want to see in fibonacci series:";

    cin>>o;

    cout<<"fibonacci series:"<<a<<" "<<b<<" ";

    for(i=2;i<o;++i)

    {

        c=a+b;

        cout<<c<<" ";

        a=b;

        b=c;

    }

    return 0;
```

```
Untitled2.cpp
1  #include<iostream>
2  using namespace std;
3  int main(){
4      int a=3, b=5, c, i, o;
5      cout<<"enter the number of elements you want to see in fibonacci series:";
6      cin>>o;
7      cout<<"fibonacci series:"<<a<<" "<<b<<" ";
8      for(i=2;i<o;++i)
9      {
10         c=a+b;
11         cout<<c<<" ";
12         a=b;
13         b=c;
14     }
15     return 0;
16 }

C:\aakram.ug23\Project1.exe
enter the number of elements you want to see in fibonacci series:24
fibonacci series:3 5 8 13 21 34 55 89 144 233 377 610 987 1597 2584 4181 6765 10946 17711 28657 46368 75025 121393 196418
-----
Process exited after 6.685 seconds with return value 0
Press any key to continue . . .
```

```
}
```

### QUESTION 03