

Question number 1 a

```
#include <iostream>
```

```
using namespace std;
```

```
int mod(int,int);
```

```
int subc(int,int);
```

```
int multi(int,int);
```

```
int div(int,int);
```

```
int main()
```

```
{
```

```
    int num1,num2;
```

```
    int mo,sub,m,d;
```

```
    cout<<"Enter number 01 ";
```

```
    cin>>num1;
```

```
    cout<<"Enter number 02 ";
```

```
    cin>>num2;
```

```
    sub=subc( num1, num2);
```

```
    cout<<"Subtraction of "<<num1<<" - "<<num2<<" = "<<sub;
```

```
    cout<<endl;
```

```
    m=multi( num1, num2);
```

```
    cout<<"Multiplication of "<<num1<<" * "<<num2<<" = "<<m;
```

```
    cout<<endl;
```

```
    d=div( num1, num2);
```

```
    cout<<"Divison of "<<num1<<" / "<<num2<<" = "<<d;
```

```
    cout<<endl;
```

```
mo=mod(num1,num2);  
cout<<"Mod of "<<num1<<" % "<<num2<<" = "<<mo;  
cout<<endl;  
  
return 0;  
}
```

```
int mod(int num1,int num2){  
    int mo=num1%num2;  
    return mo;  
}
```

```
int subc(int num1,int num2){  
    int sub=num1-num2;  
    return sub;  
}
```

```
int multi(int num1,int num2){  
    int m=num1*num2;  
    return m;  
}
```

```
int div(int num1,int num2){  
    int d=num1/num2;  
    return d;  
}
```

```
D:\1st sm Programing fundamentals\lab-8 p.f\Question 1 a.exe
Enter number 01 23
Enter number 02 23
Subtraction of 23 - 23 = 0
Multiplication of 23 * 23 = 529
Divison of 23 / 23 = 1
Mod of 23 % 23 = 0

-----
Process exited after 4.006 seconds with return value 0
Press any key to continue . . .
```

Question number 1 b

```
#include <iostream>

using namespace std;

int square (int);

int main()
{
    int num,sqt;

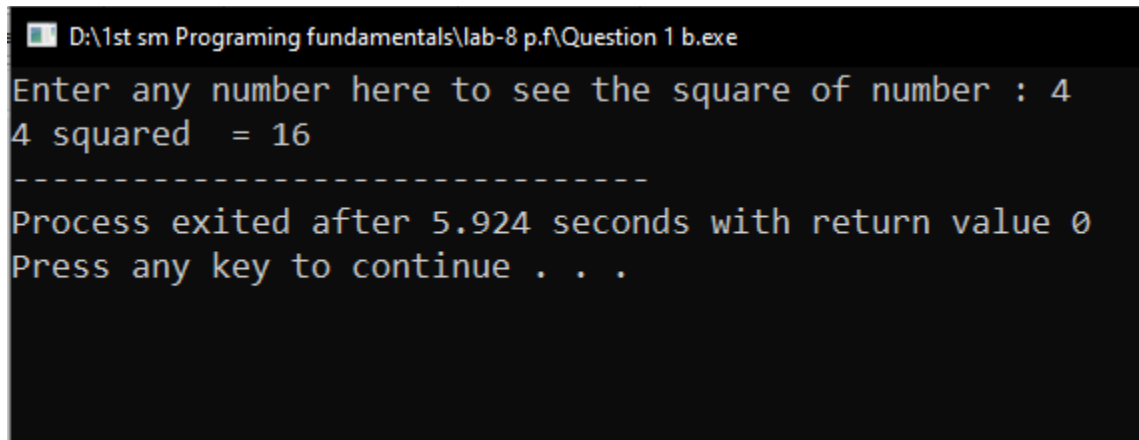
    cout<<"Enter any number here to see the square of number : ";
    cin>>num;

    sqt=square (num);
    cout<<num<<" squared = "<<sqt;

    return 0;
```

```
}
```

```
int square (int num){  
    int sqt=num*num;  
    return sqt;  
}
```



```
D:\1st sm Programing fundamentals\lab-8 p.f\Question 1 b.exe  
Enter any number here to see the square of number : 4  
4 squared = 16  
-----  
Process exited after 5.924 seconds with return value 0  
Press any key to continue . . .
```

Question number 1 c

```
#include <iostream>  
  
using namespace std;  
  
int g (int,int);  
  
int main()  
{  
    int num1,num2,maxi;  
  
    cout<<"Enter number 1 here : ";  
    cin>>num1;  
  
    cout<<"Enter number 2 here : ";  
    cin>>num2;  
  
    maxi= g (num1,num2);  
    cout<<"The greater number here is : "<<maxi;
```

```
return 0;
```

```
}
```

```
int gs (int num1,int num2){
```

```
    int max;
```

```
    if(num1>num2)
```

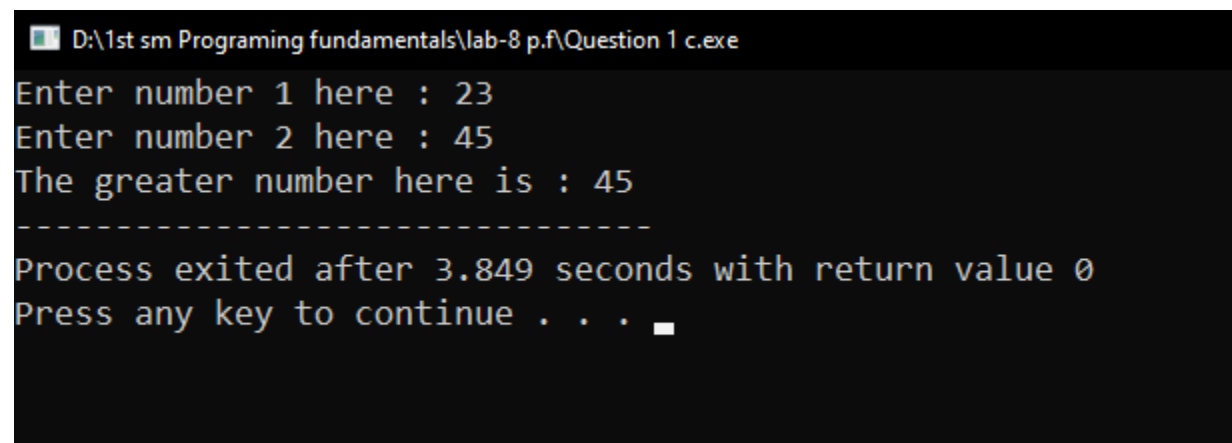
```
        max=num1;
```

```
    else if(num1<num2)
```

```
        max=num2;
```

```
    return max;
```

```
}
```



The screenshot shows a Windows command prompt window titled "D:\1st sm Programing fundamentals\lab-8 p.f\Question 1 c.exe". The program prompts the user to enter two numbers. The first input is 23, and the second input is 45. The program then outputs "The greater number here is : 45". Below this, a separator line of dashes is shown, followed by the message "Process exited after 3.849 seconds with return value 0". The prompt "Press any key to continue . . ." is displayed at the bottom, with a small black square indicating a key press.

```
D:\1st sm Programing fundamentals\lab-8 p.f\Question 1 c.exe
Enter number 1 here : 23
Enter number 2 here : 45
The greater number here is : 45
-----
Process exited after 3.849 seconds with return value 0
Press any key to continue . . .
```

Question number 1 d

```
#include <iostream>
```

```
#include <string>
```

```
using namespace std;
```

```
string E_O (int);
```

```
int main()
{
    int num;
    string EorO;

    cout<<"Enter any number here : ";
    cin>>num;

    EorO=E_O(num);
    cout<<EorO;

    return 0;
}
```

```
string E_O (int num){
    string even_Or_odd;
    if(num%2==0)
        even_Or_odd="Even";
    else if(num%2!=0)
        even_Or_odd="Odd";

    return even_Or_odd;
}
```

```
D:\1st sm Programing fundamentals\lab-8 p.f\Question 1 d.exe
Enter any number here : 45
Odd
-----
Process exited after 3.337 seconds with return value 0
Press any key to continue . . .
```

Question number 1 e

```
#include <iostream>

using namespace std;

double perc (int,double);

int main()
{
    int Total_marks=500;
    double p,Obtained_marks;

    cout<<"Enter you obtained marks here : ";
    cin>>Obtained_marks;

    p = perc (Total_marks,Obtained_marks);
    cout<<"percentage is : "<<p;

    return 0;
}

double perc (int Total_marks,double Obtained_marks){
    double p;
    p=(Obtained_marks/Total_marks)*100;
    return p;
}
```

```
}
```

```
D:\1st sm Programing fundamentals\lab-8 p.f\Question 1 e.exe
Enter you obtained marks here : 345
percentage is :69
-----
Process exited after 3.426 seconds with return value 0
Press any key to continue . . .
```

Question number 1 f

```
#include <iostream>
```

```
using namespace std;
```

```
double perc (int,double);
```

```
char grade (double);
```

```
int main()
```

```
{
```

```
    int Total_marks=500;
```

```
    double p,Obtained_marks;
```

```
    char gr;
```

```
    cout<<"Enter you obtained marks here : ";
```

```
    cin>>Obtained_marks;
```

```
    p = perc (Total_marks,Obtained_marks);
```

```
    cout<<"percentage is : "<<p;
```

```
    gr= grade (p);
```

```
    cout<<"\nyour grade is : "<<gr;
```



```
return 0;
```

```
}
```

```
double perc (int Total_marks,double Obtained_marks){
```

```
    double p;
```

```
    p=(Obtained_marks/Total_marks)*100;
```

```
    return p;
```

```
}
```

```
char grade (double per){
```

```
    char gr;
```

```
    if(per>=80&&per<=100)
```

```
        gr='A';
```

```
    else if(per>=70&&per<80)
```

```
        gr='B';
```

```
    else if (per>=60&&per<70)
```

```
        gr='C';
```

```
    else if(per>=0&&per<60)
```

```
        gr='F';
```

```
    return gr ;
```

```
}
```

```
D:\1st sm Programing fundamentals\lab-8 p.f\Question 1 f.exe
Enter you obtained marks here : 367
percentage is :73.4
your grade is : B
-----
Process exited after 4.013 seconds with return value 0
Press any key to continue . . .
```

Question number 1 g

```
#include <iostream>

using namespace std;

bool E_O (int);

int main()
{
    int num,num2;
    bool EorO;

    cout<<"Enter any number here : ";
    cin>>num;

    EorO=E_O(num);
    cout<<EorO;

    cout<<"\nEnter number to check if it is even or not : ";
    cin>>num2;

    if(EorO==1){
```

```
        if(num2%2==0)
            cout<<"\nThe number is Even";
        else
            cout<<"The number is not Even";
    }
```

```
    if(EorO==0){
        if(num2%2!=0)
            cout<<"\nThe number is not Even";
        else
            cout<<"The number is Even";
    }
```

```
    return 0;
}
```

```
bool E_O (int num){
    bool even_Or_odd;
    if(num%2==0)
        even_Or_odd=true;
    else if(num%2!=0)
        even_Or_odd=false;

    return even_Or_odd;
}
```

```
D:\1st sm Programing fundamentals\lab-8 p.f\Question 1 g.exe
Enter any number here : 23
0
Enter number to check if it is even or not : 12
The number is Even
-----
Process exited after 3.777 seconds with return value 0
Press any key to continue . . .
```

Question number 1 h

```
#include <iostream>

using namespace std;

int sumr (int);

int main()
{
    int sum;
    int range ;
    cout<<"Enter range to see the sum here : ";
    cin>>range;

    sum= sumr (range);
    cout<<"Sum of all "<<range<<" positive integers is "<<sum;

    return 0;
}

int sumr (int range){
    int sum=0,t;
    if(range>=0){
```

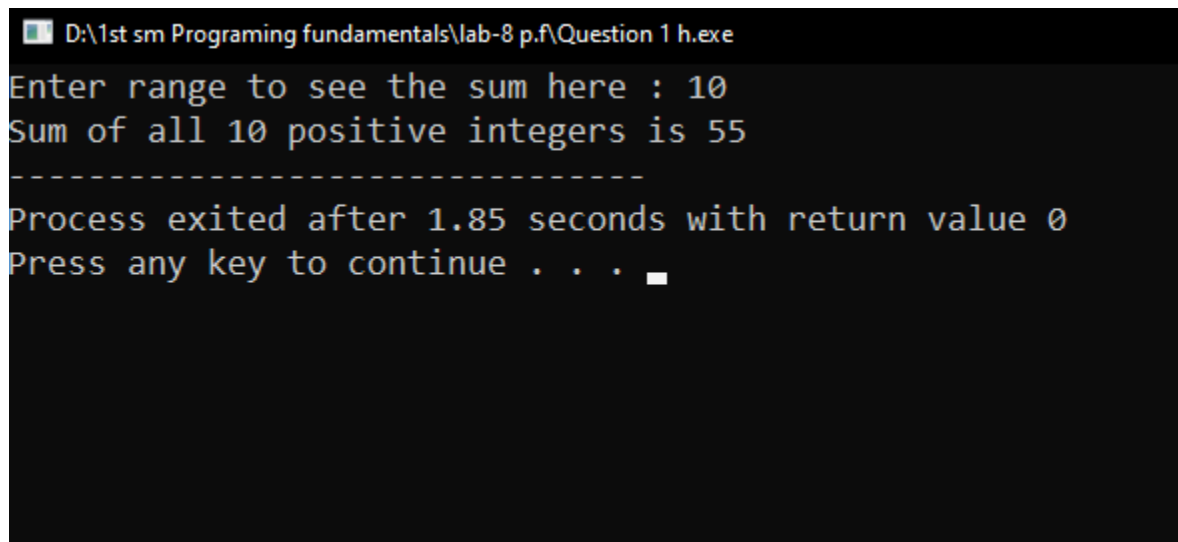
```

        for(int i=0 ; i<=range ;i++){
            sum+=i;
        }

    }

    t=sum;
    return t;
}

```



```

D:\1st sm Programing fundamentals\lab-8 p.f\Question 1 h.exe
Enter range to see the sum here : 10
Sum of all 10 positive integers is 55
-----
Process exited after 1.85 seconds with return value 0
Press any key to continue . . .

```

Question number 1 i

```

#include <iostream>

using namespace std;

int printTable (int);
int printTable (int,int);
int main()
{
    int t_n,r;

```

```

cout<<"Enter any number to prints its table : ";
cin>>t_n;

printTable ( t_n);
cout<<endl;

cout<<"Enter any number to prints its table : ";
cin>>t_n;
cout<<"Enter the final range value : ";
cin>>r;
printTable ( t_n,r);

return 0;
}

int printTable (int t_n){
    for(int i=1 ; i<=10 ;i++){
        cout<<t_n<<" x "<<i<<" = "<<t_n*i<<endl;
    }
}

int printTable (int t_n,int r){
    for(int i=1 ; i<=r ;i++){
        cout<<t_n<<" x "<<i<<" = "<<t_n*i<<endl;
    }
}

```

D:\1st sm Programing fundamentals\lab-8 p.f\Question 1 i.exe

Enter any number to prints its table : 12

12 x 1 = 12

12 x 2 = 24

12 x 3 = 36

12 x 4 = 48

12 x 5 = 60

12 x 6 = 72

12 x 7 = 84

12 x 8 = 96

12 x 9 = 108

12 x 10 = 120

Enter any number to prints its table : 12

Enter the final range value : 5

12 x 1 = 12

12 x 2 = 24

12 x 3 = 36

12 x 4 = 48

12 x 5 = 60

Process exited after 7.296 seconds with return value 0

Press any key to continue . . .