RABIA BATOOL

2022-BSE-067

PF LAB MANUAL

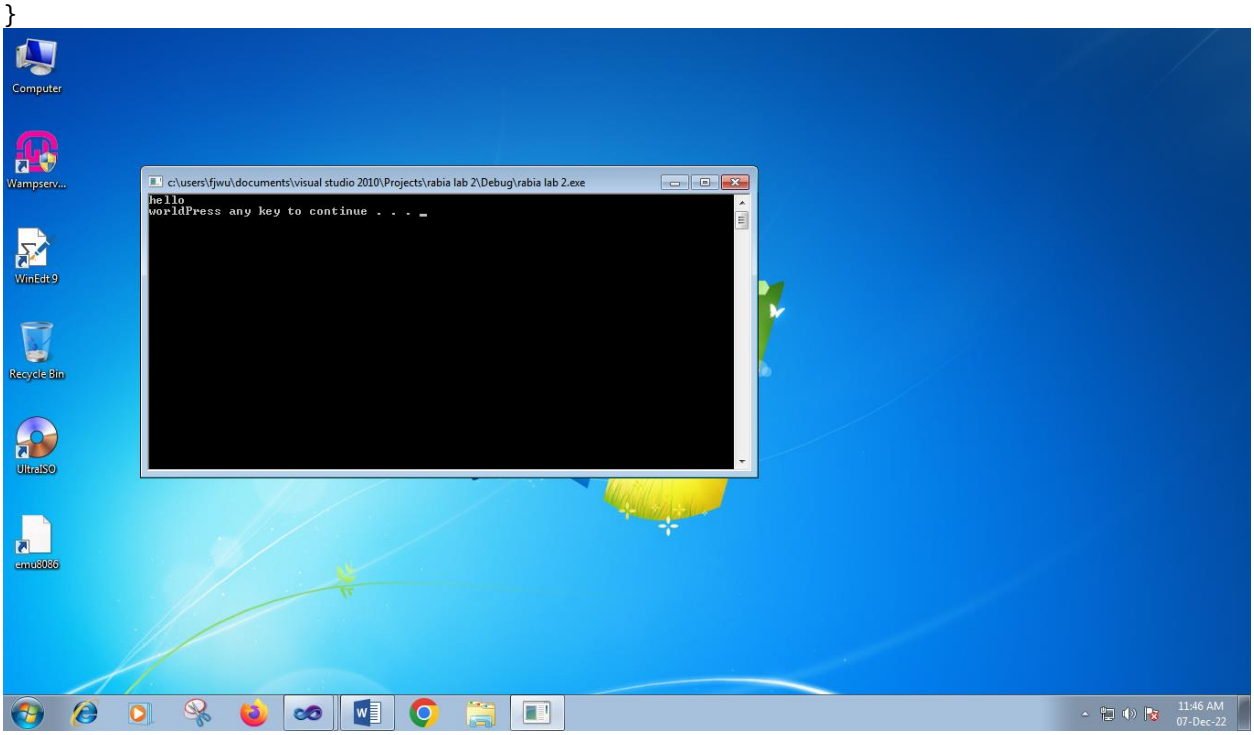
Submitted to: Sir Shoaib

LAB #1

Program # I

```
// rabia lab 2.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>;
using namespace std;

//int main()

int _tmain(int argc, _TCHAR* argv[])
{
	cout<<"hello"<<endl<<"world";
	system("pause");
	return 0;
```

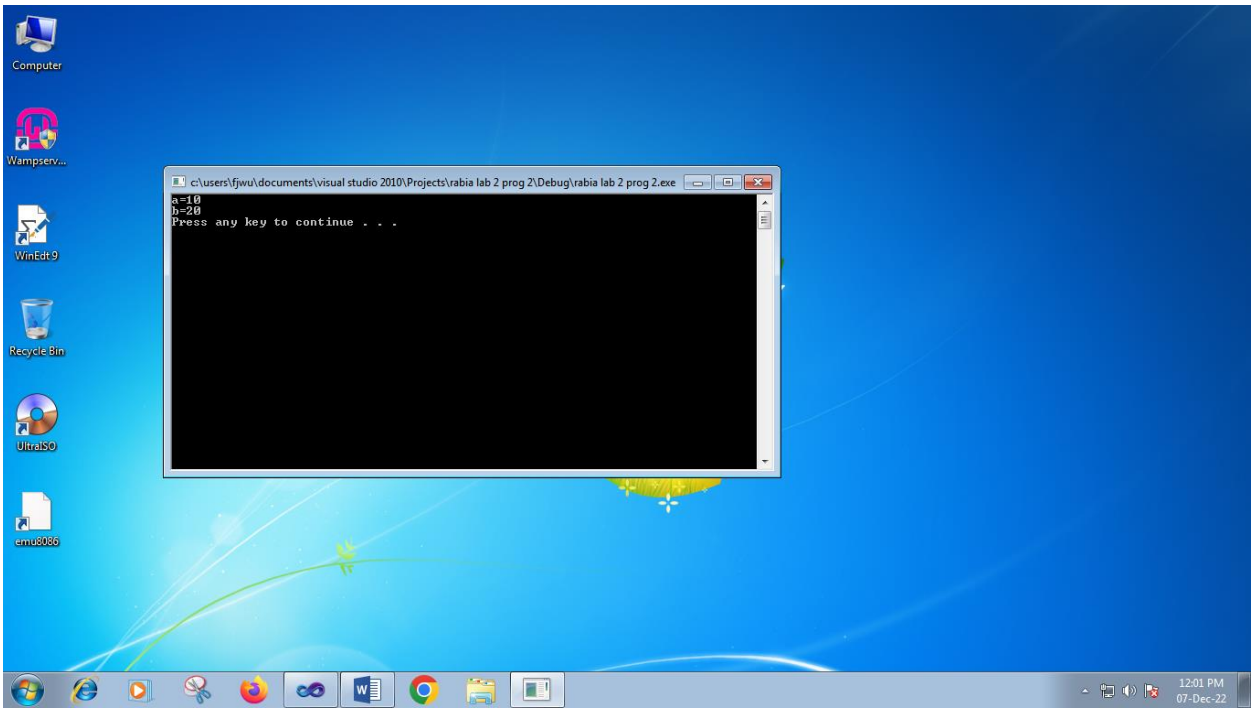
```
}
```


Computer
Wampserv...
WinEdt 9
Recycle Bin
UltraISO
emu8086
c:\users\fjwu\documents\visual studio 2010\Projects\rabia lab 2\Debug\rabia lab 2.exe
hello
worldPress any key to continue . . .
11:46 AM
07-Dec-22

LAB #2

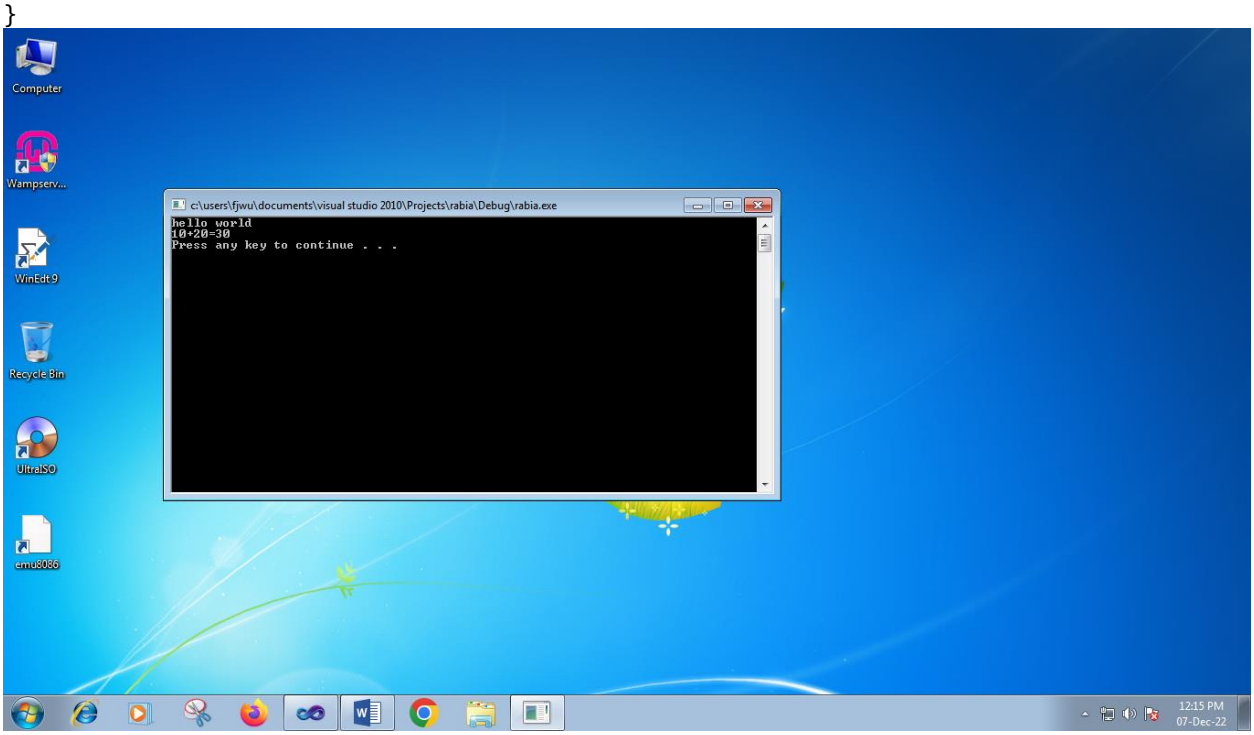
PROGRAM # II

```
// rabia lab 2 prog 2.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>;
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{
	int a;
	int b;
	a=10;
	b=20;
	cout<<"a="<<a<<endl;
	cout<<"b="<<b<<endl;
	system("pause");
	return 0;
```



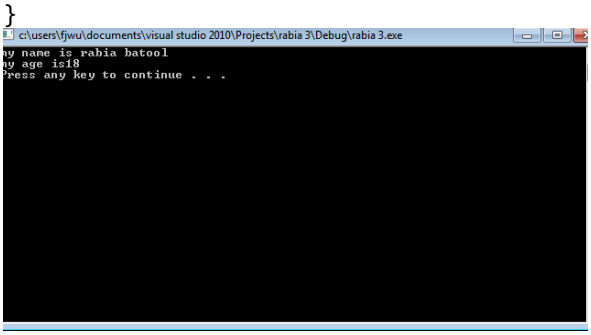
PROGRAM # III

```
// rabia.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>;
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{
	cout<<"hello world"<<endl;
	int a=10;
	int b=20;
	int c;
    c=a+b;
	cout<<a<<"+"<<b<<"="<<c<<endl;
	system("pause");

	return 0;
}
```



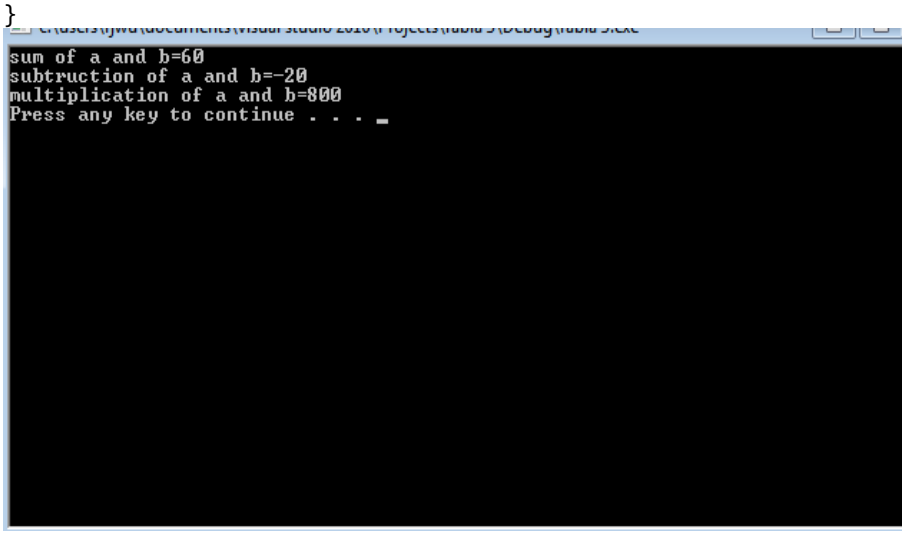
TASK :2

```
// rabia 3.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>;
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{
	int age=18;
	cout<<"my name is rabia batool"<<endl<<"my age is"<<age<<endl;
	system("pause");

	return 0;
}
```



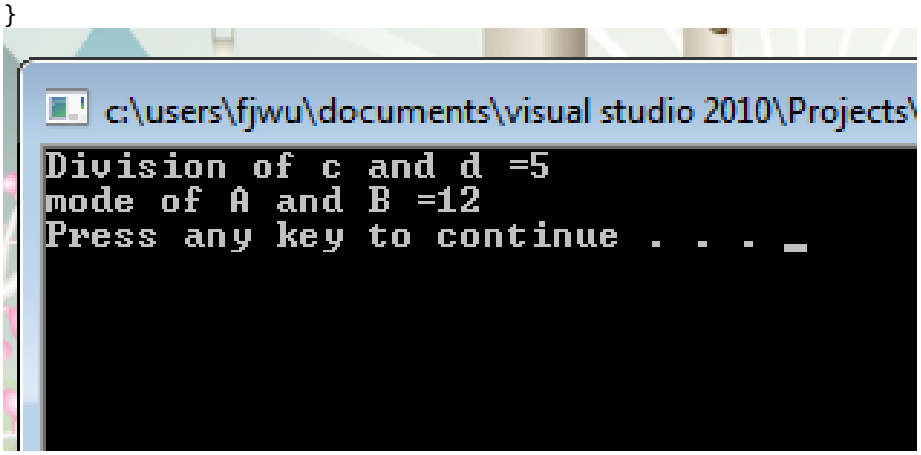
TASK :3

```
// rabia 3.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>;
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{
	int a=20;
	int b=40;
	int x;
	int y;
	int z;
	x=a+b;
	y=a-b;
	z=a*b;
	cout<<"sum of a and b="<<x<<endl;
	cout<<"subtruction of a and b="<<y<<endl;
	cout<<"multiplication of a and b="<<z<<endl;
	system("pause");

	return 0;
}
```



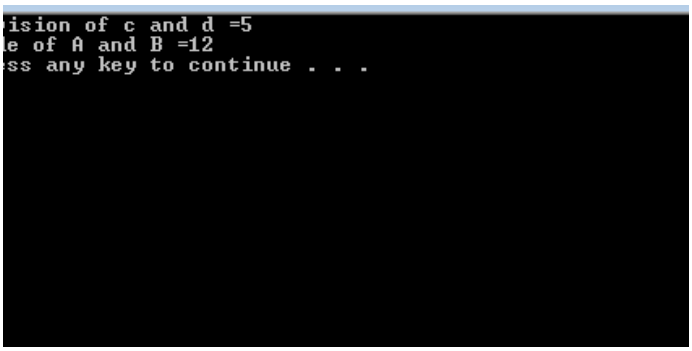
TASK :4

```
// rabia4.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>;
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{
	int A=12;
	int B=13;
	int x;
	float c=10.0;
	float d=2.0;
	int y;
	x=A%B;
	y=c/d;
	cout<<"Division of c and d ="<<y<<endl;
	cout<<"mode of A and B ="<<x<<endl;
	system("pause");
	return 0;
}
```



TASK :5

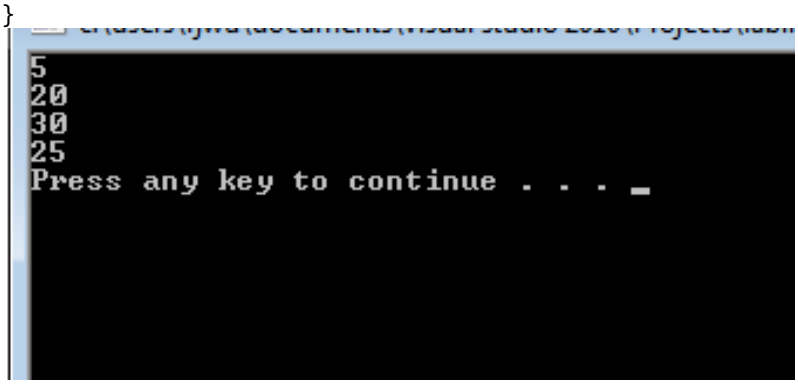
```
// rabia4.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>;
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{
	int a=12;
	int b=4;
	int c=0;
	cout<<"Before swaping ="<<endl;
	cout<<"a="<<a<<endl;
	cout<<"b="<<b<<endl;
	c=a;
	b=c;
	a=b;
	cout<<"after swaping ="<<endl;
	cout<<"a"<<a<<endl;
	cout<<"b"<<b<endl;
	system("pause");
	return 0;
}
```



LAB # 3

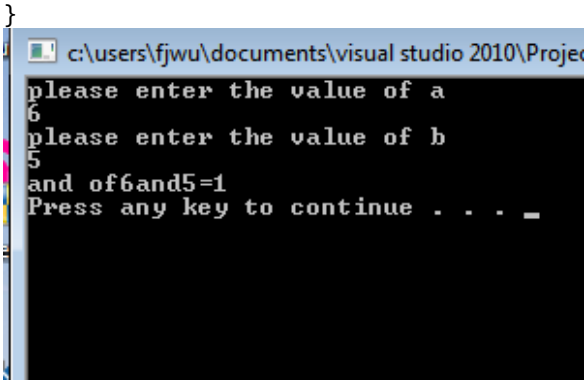
Task 1

```
// lab.rabia 3.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{int a=5;
cout<<a<<endl;
cout<<a*4<<endl;
cout<<a*6<<endl;
cout<<a*5<<endl;
system("pause");
	return 0;
}
```



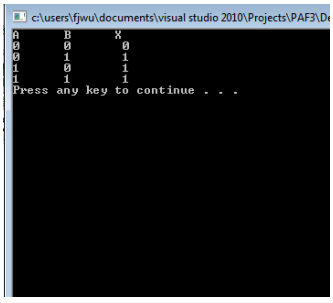
Task #2

```
// lab rabia 3.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{int a,b;
int c;
cout<<"please enter the value of a"<<endl;
cin>>a;
cout<<"please enter the value of b"<<endl;
cin>>b;
c= a&&b;
cout<<"and of"<<a<<"and"<<b<<"="<<c<<endl;

	return 0;
}
```



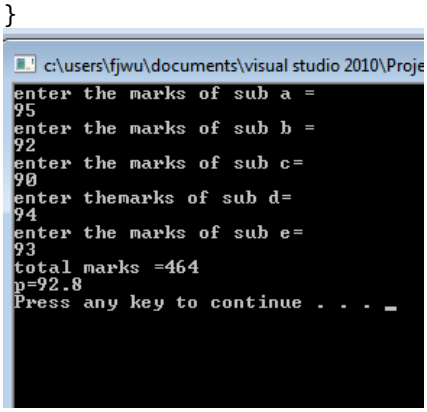
Task3

```
// 3 lab rabia.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{int a,b;
int a=0; b=1;
cout<<"A      B      X"<<endl;
cout<<a<<"     "<<a<<"    "<<(a||a)<<endl;
cout<<a<<"     "<<b<<"    "<<(a||b)<<endl;
cout<<b<<"     "<<b<<"     "<<(b||b)<<endl;
cout<<b<<"     "<<a<<"     "<<(b||b)<<endl;
       system("pause");
       return 0;
}
```



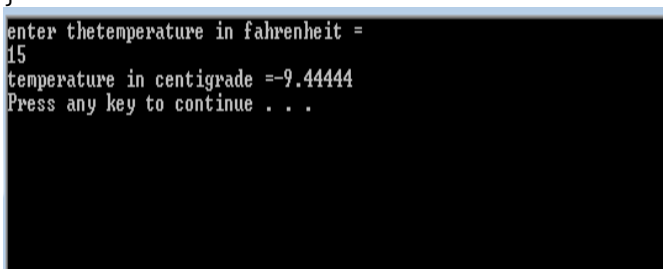
Task# 4

```
// num 1.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{float A,B,C,D,E;
float Tmarks;
float p;
cout<<"enter the marks of sub a ="<<endl;
cin>>A;
cout<<"enter the marks of sub b ="<<endl;
cin>>B;
cout<<"enter the marks of sub c="<<endl;
cin>>C;
cout<<"enter themarks of sub d="<<endl;
cin>>D;
cout<<"enter the marks of sub e="<<endl;
cin>>E;
Tmarks=A+B+C+D+E;
cout<<"total marks ="<<Tmarks<<endl;
p=(Tmarks*100)/500;
cout<<"p="<<p<<endl;


	return 0;
}
```



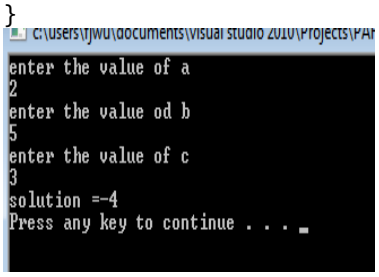
Task#5

```
// pf 4.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{float C,F;
cout<<"enter thetemperature in fahrenheit ="<<endl;
cin>>F;
C=(F-32)/1.8;
cout<<"temperature in centigrade ="<<C<<endl;
system("pause");
	return 0;
}
```



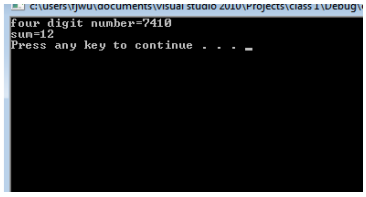
Task# 6

```
// PAFF.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{float F,a,b,c;
cout<<"enter the value of a"<<endl;
cin>>a;
cout<<"enter the value od b"<<endl;
cin>>b;
cout<<"enter the value of c"<<endl;
cin>>c;
F=(-b+b*b-4*a*c)/2*a;
cout<<"solution ="<<F<<endl;
system("pause");
	return 0;
}
```



Task #7

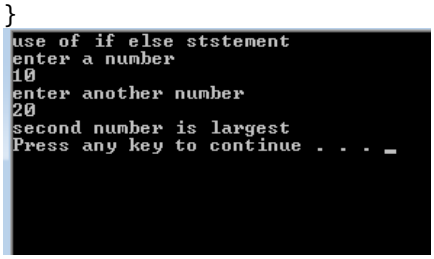
```
// class 1.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{int X=7410;
int d1,d2,d3,d4,rem,sum;
cout<<"four digit number="<<X<<endl;
d1=(X)/1000;
rem=X%1000;
d2=(rem)/100;
rem=rem%100;
d3=(rem)/10;
rem=rem%10;
d4=(rem)/1;
rem=rem%1;
sum=d1+d2+d3+d4;
cout<<"sum="<<sum<<endl;
system("pause");
	return 0;
}
```



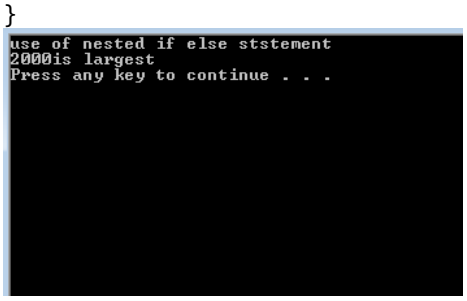
LAB#4

TASK 1

```
                    / rabia lab 4.cpp : Defines the entry point for the console
application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{int a,b;
cout<<"use of if else ststement"<<endl;
cout<<"enter a number"<<endl;
cin>>a;
cout<<"enter another number"<<endl;
cin>>b;
if(a>b)
cout<<"first number is greater"<<endl;
else
cout<<"second number is largest"<<endl;
system("pause");
       return 0;
}
```

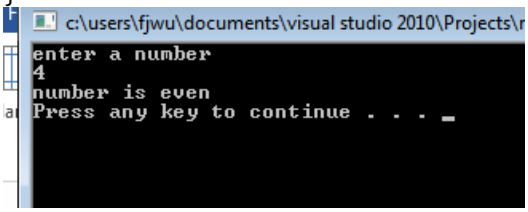


```
/ rabia lab 4.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{int a=100,b=2000,c=300;
cout<<"use of nested if else statement"<<endl;
if(a>b)
{if(a>c)
cout<<a<<"is largest"<<endl;
else if (c>b)
cout<<c<<"is largest"<<endl;
}
else
{if(b>c)
cout<<b<<"is largest"<<endl;
else
	cout<<c<<"is largest"<<endl;
}
system("pause");
	return 0;
}
```



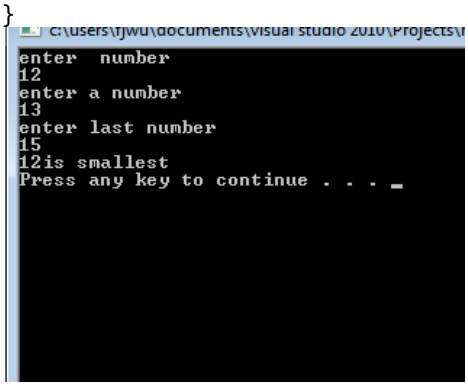
TASK 2

```
/ rabia lab 4.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{int n;
cout<<"enter a number"<<endl;
cin>>n;
if(n%2==0)
	cout<<"number is even"<<endl;
else
	cout<<"number is odd"<<endl;
system("pause");
	return 0;
}
```



TASK 3

```
/ rabia lab 4.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{int a,b,c;
cout<<"enter  number"<<endl;
cin>>a;
cout<<"enter a number"<<endl;
cin>>b;
cout<<"enter last number"<<endl;
cin>>c;
if(a<b)
{if(a<c)
cout<<a<<"is smallest"<<endl;
else
	if(c<b)
		cout<<c<<"ia smallest"<<endl;
}
else
{if(b<a)
	cout<<b<<"is smallest"<<endl;
else
	cout<<c<<"is smallest"<<endl;
}
system("pause");
	return 0;
}
```



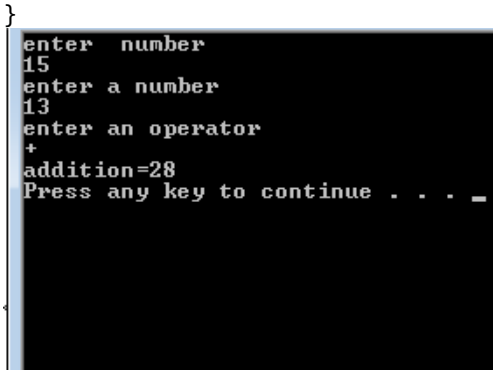
TASK 4

```
/ rabia lab 4.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{int a,b,c,d;
cout<<"enter  number"<<endl;
cin>>a;
cout<<"enter a number"<<endl;
cin>>b;
cout<<"enter  number"<<endl;
cin>>c;
cout<<"enter a num"<<endl;
cin>>d;
if(a>b && a>c && a>d)
cout<<a<<"is largest"<<endl;
else
       if(b>a && b>c && b>>d)
              cout<<b<<"is largest"<<endl;
else
    if(c>a && c>b && c>d)
       cout<<c<<"is largest"<<endl;
else
       cout<<d<<"is largest"<<endl;
system("pause");
       return 0;
}
```

```
enter  number
14
enter a number
17
enter  number
28
enter a num
30
30is largest
Press any key to continue . . .
```

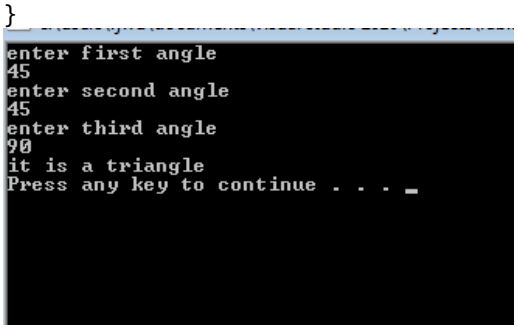
TASK 5

```
/ rabia lab 4.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{int a,b;
char op;
cout<<"enter  number"<<endl;
cin>>a;
cout<<"enter a number"<<endl;
cin>>b;
cout<<"enter an operator"<<endl;
cin>>op;
if(op='+')
{cout<<"addition="<<(a+b)<<endl;}
else
       if(op='-')
       {cout<<"subtruction"<<(a-b)<<endl;}
else
    if(op='*')
       {cout<<"multiplication="<<(a*b)<<endl;}
else if (op='/')
{cout<<"division="<<(a/b)<<endl;}
system("pause");
       return 0;
}
```



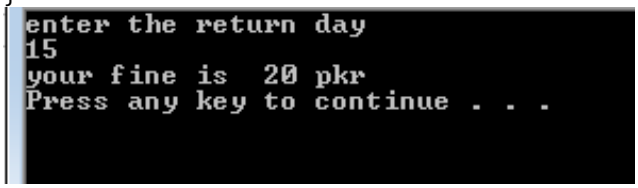
TASK 6

```
/ rabia lab 4.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{int a,b,c,angle;
cout<<"enter first angle"<<endl;
cin>>a;
cout<<"enter second angle"<<endl;
cin>>b;
cout<<"enter third angle"<<endl;
cin>>c;
angle=a+b+c;
if(angle==180)
	cout<<"it is a triangle"<<endl;
else
	cout<<"it  s not a triangle"<<endl;
system("pause");
	return 0;
}
```



TASK 7

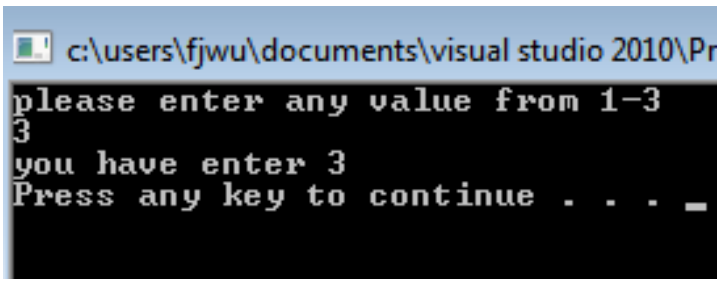
```
/ rabia lab 4.cpp : Defines the entry point for the console application.

//

#include "stdafx.h"
#include<iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{int days ;
cout<<"enter the return day"<<endl;
cin>>days;
if(days<=7)
	cout<<"your fine is10pkr"<<endl;
else if(days>=8 || days<=14)
	cout<<"your fine is  20 pkr"<<endl;
else if(days>=15 ||days<=31)
	cout<<"your fine is 50 pkr"<<endl;
else
	cout<<"your membership is cancelled"<<endl;
system("pause");
	return 0;
}
```



Lab #5

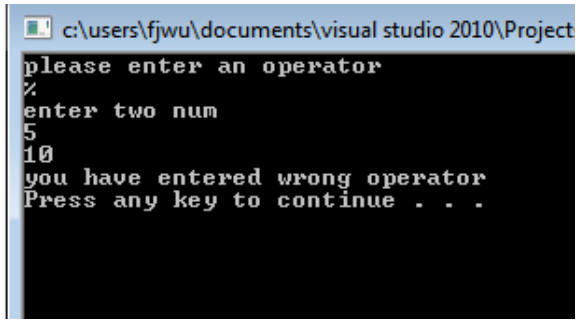
TASK #1

```
// amjnbn.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{int a;
cout<<"please enter any value from 1-3"<<endl;
cin>>a;
switch(a)
{case 1:
cout<<"you have enter 1"<<endl;
break;
case 2:
	cout<<"you have entered 2"<<endl;
break;
case 3:
	cout<<"you have enter 3"<<endl;
	break;
default:
	cout<<"you have entered other number" <<endl;
}
system ("pause");

	return 0;
}
```



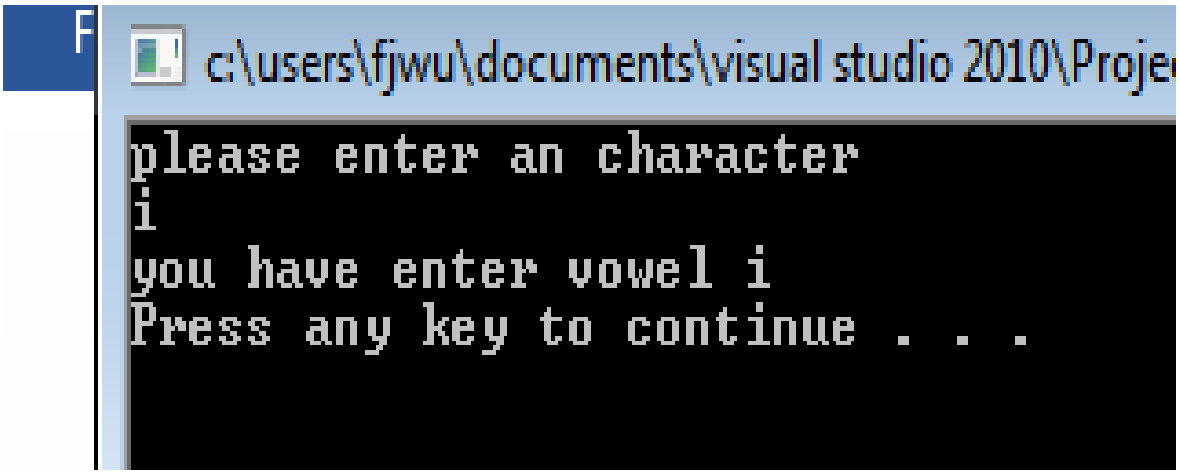
TASK #2

```
// amjnbn.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{char op,a,b;
cout<<"please enter an operator"<<endl;
cin>>op;
cout<<"enter two num"<<endl;
cin>>a;
cin>>b;
switch(a)
{case ('+'):
cout<<"add a and b"<<(a+b)<<endl;
break;
case ('-'):
	cout<<"subtruct a and b"<<(a-b)<<endl;
break;
case ('*'):
	cout<<"multiply a and b"<<(a*b)<<endl;
break;
case('/'):
	cout<<"divide a and b"<<(a/b)<<endl;
break;
default:
	cout<<"you have entered wrong operator" <<endl;
}
system ("pause");

	return 0;
}
```



TASK # 3

```
// amjnbn.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{char ch;
cout<<"please enter an character"<<endl;
cin>>ch;
switch(ch)
{case ('a'):
cout<<"you enter vowel a"<<endl;
break;
case ('e'):
	cout<<"you have enter vowel e"<<endl;
break;
case ('i'):
	cout<<"you have enter vowel i"<<endl;
break;
case('o'):
	cout<<"you have enter vowel o"<<endl;
break;
case('u'):
	cout<<"you have enter vowel u"<<endl;
break;
default:
	cout<<"you have entered consonant" <<endl;
}
system ("pause");

	return 0;
}
```

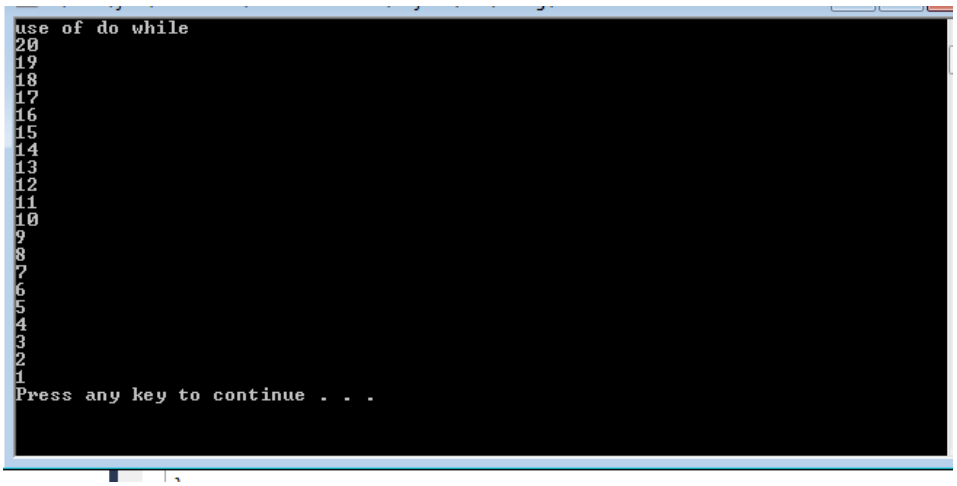


TASK #4(I)

```
// amjnbn.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{int i=0;
while(i<10)
{cout<<"i"<<endl;
i++;
}
system ("pause");

	return 0;
}
```

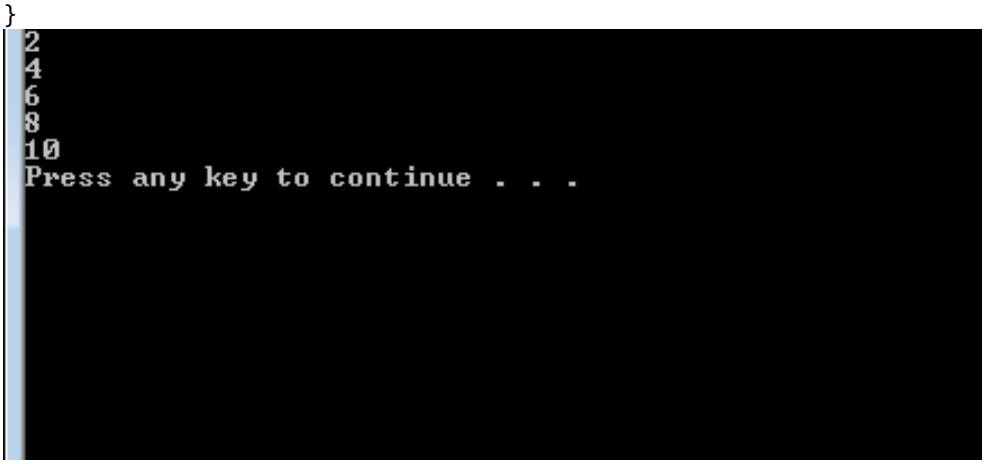
TASK # 4 (II)

```
// enu.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{
	cout<<"use of do while"<<endl;
	int i=20;
		do
		{cout<<i<<endl;
		i--;
		}while(i>0);
		system ("pause");
	return 0;
}
```



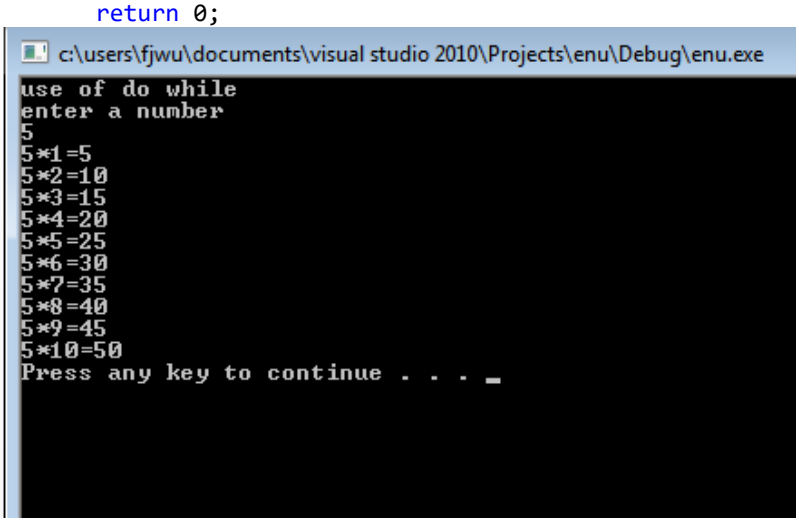
TASK #5

```
// amjnbn.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{int i,res;
while(i<=10)
{res=i*2;
cout<<res<<endl;
i++;
}
system ("pause");

	return 0;
}
```



TASK # 6

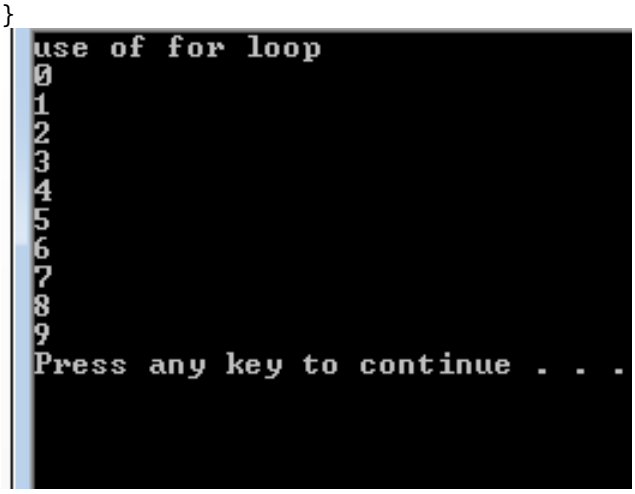
```
// enu.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{
	cout<<"use of do while"<<endl;
	int i=1,x,res;
	cout<<"enter a number"<<endl;
	cin>>x;
		do
		{res=x*i;
			cout<<x<<"*"<<i<<"="<<res<<endl;
		i++;
		}while(i<=10);
		system ("pause");
	return 0;
```



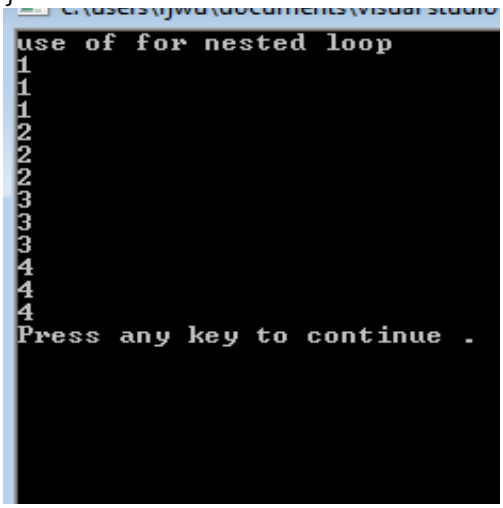
LAB #6

TASK 1

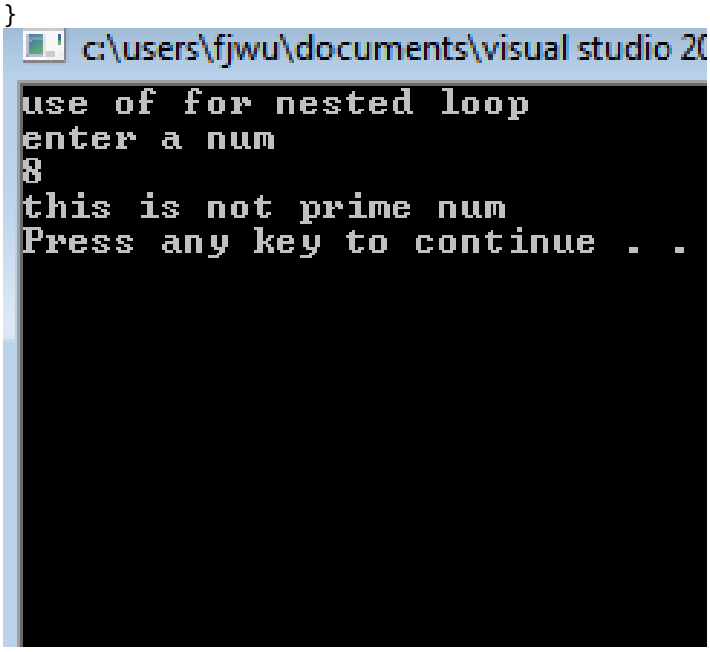
```
// SGWYWET.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{cout<<"use of for loop"<<endl;
int i;
for(i=0;i<10;i++)
{
	cout<<i<<endl;
}
system("pause");
	return 0;
}
```



```
// SGWYWET.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{cout<<"use of for nested loop"<<endl;
int i,j;
for(i=1;i<=4;i++)
{for(j=1;j<=3;j++)
{
	cout<<i<<"\t"<<endl;
}
}
system("pause");
	return 0;
}
```

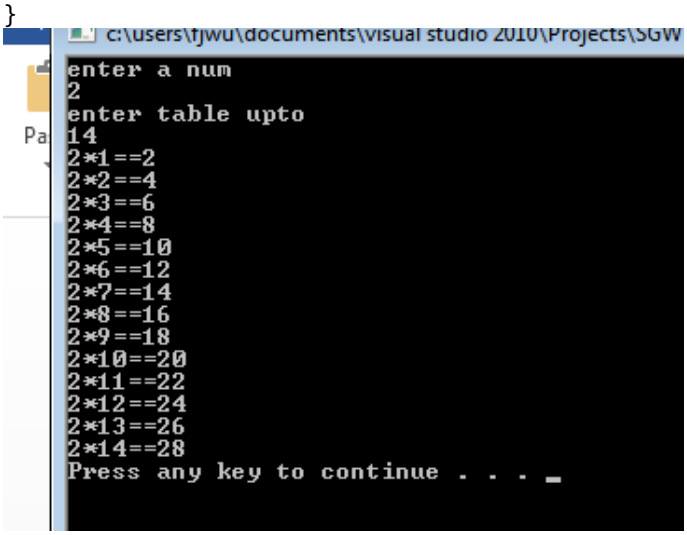


```
// SGWYWET.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{cout<<"use of for nested loop"<<endl;
int i,n,count=0;
cout<<"enter a num"<<endl;
cin>>n;

for(i=2;i<=n;i++)
{if(n%i==0)
{
	count=1;
	break;
}
}
if(count==0)
	cout<<"this is prime num"<<endl;
else
	cout<<"this is not prime num"<<endl;

system("pause");
	return 0;
}
```



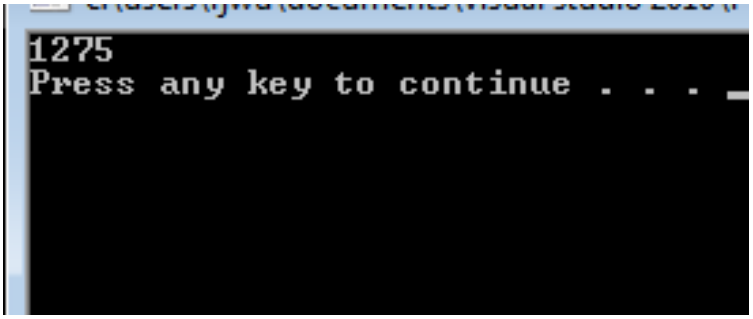
Task#2

```
// SGWYWET.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{int i,x,j,res;
cout<<"enter a num "<<endl;
cin>>x;
cout<<"enter table upto"<<endl;
cin>>j;
for(i=1;i<=j;i++)
{
	res=i*x;
	cout<<x<<"*"<<i<<"=="<<res<<endl;
}
system("pause");
	return 0;
}
```



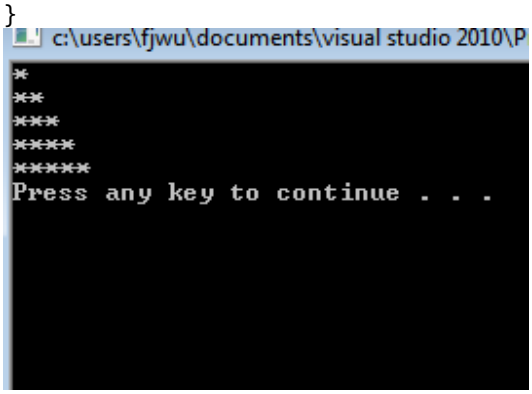
Task #3

```
// SGWYWET.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;
int _ return 0;
}
tmain(int argc, _TCHAR* argv[])
{int i,res=0;
for(i=1;i<=50;i++)
{
	res=res+i;
}
	cout<<res<<endl;

system("pause");
```



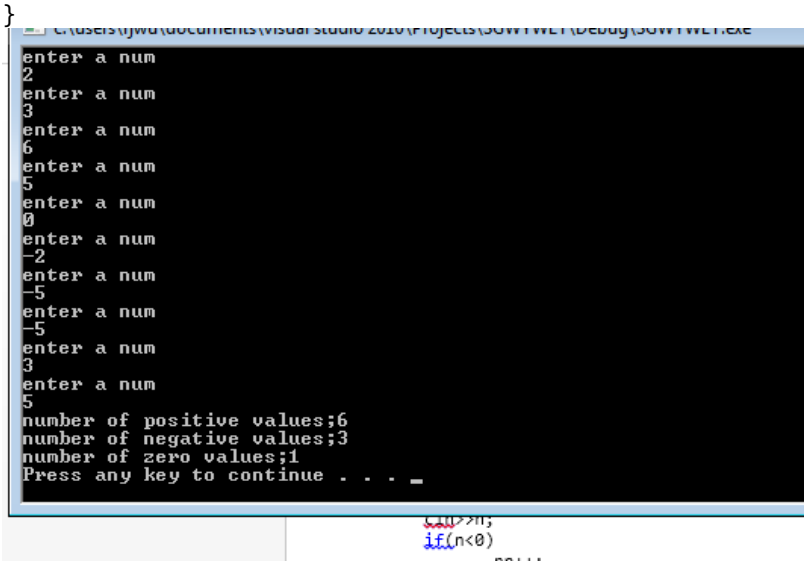
Task #4

```
// SGWYWET.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{
for(int j=1;j<=5;j++)
{

	for(int i=1;i<=j;i++)

	cout<<"*";
	cout<<endl;

}
system("pause");
	return 0;
}
```



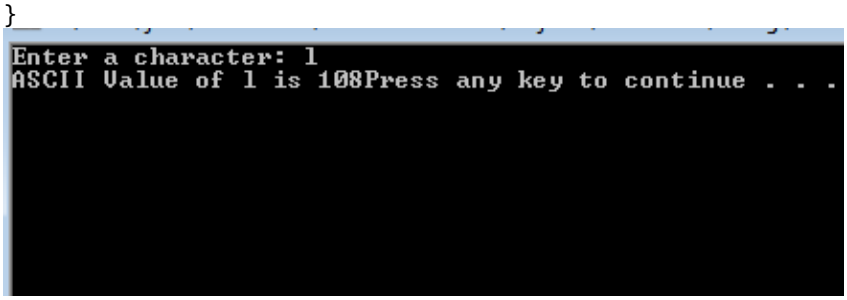
Task#5

```
// SGWYWET.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{
int n=0,np=0,nn=0,nz=0;
for(int i= 1;i<=10;i++)
{
cout<<"enter a num"<<endl;
cin>>n;
if(n<0)
	nn++;
else if (n>0)
	np++;
else if (n==0)
	nz++;
}
cout<<"number of positive values;"<<np<<endl;
cout<<"number of negative values;"<<nn<<endl;
cout<<"number of zero values;"<<nz<<endl;
system("pause");
	return 0;
}
```



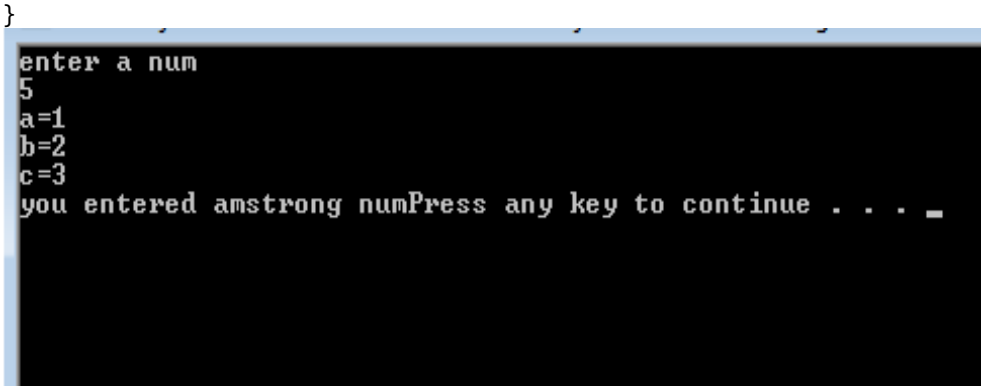
Task #6

```
// SGWYWET.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{
 char c;
 cout << "Enter a character: ";
 cin >> c;
 cout << "ASCII Value of " << c << " is " << int(c);

system("pause");
	return 0;
}
```



Task #7

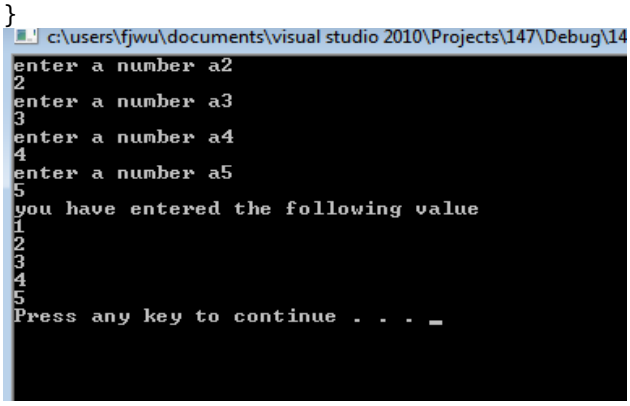
```
// SGWYWET.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{
int i,a,b,c,res;
cout<<"enter a num"<<endl;
cin>>i;
cout<<"a=";
cin>>a;
cout<<"b=";
cin>>b;
cout<<"c=";
cin>>c;
res= (a*a*a)+(b*b*b)+(c*c*c);
if(i=res)
	cout<<"you entered amstrong num";
else
cout<<"not amstrong";
system("pause");
	return 0;
}
```



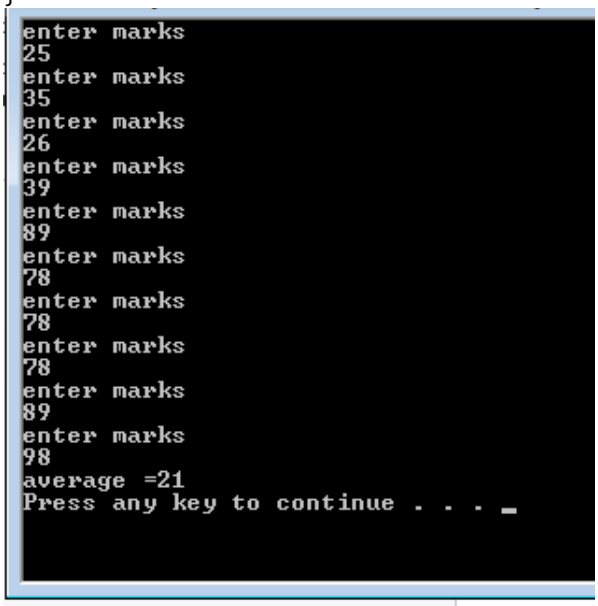
Lab #7

Task #1

```
// 147.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>;
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{cout<<"example of arrays"<<endl;
int a[5];
for(int i=0;i<5;i++)
{cout<<"enter a number a"<<i+1<<endl;
cin>>a[i];
}cout<<"you have entered the following value"<<endl;
for(int j=0;j<5;j++)
	{cout<<a[j]<<endl;}
system("pause");
	return 0;
}
```

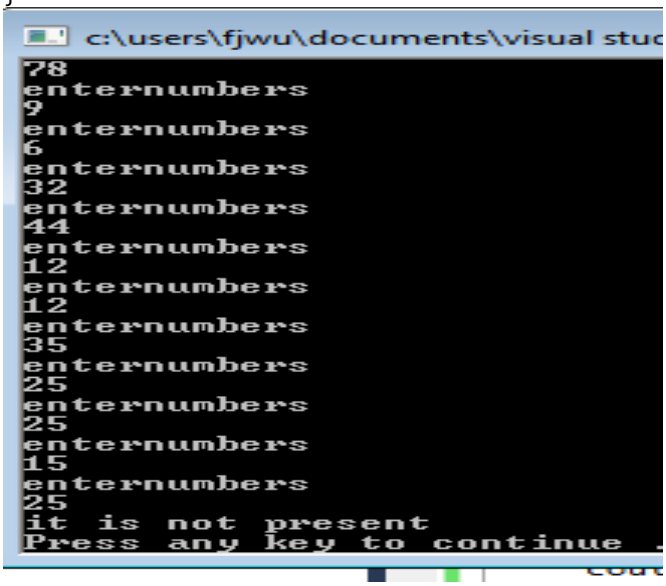


```cpp
// 147.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>;
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{
int ave,sum=0,i;
int marks[10];
for(int i=0;i<10;i++)
{cout<<"enter marks"<<endl;
cin>>marks[i];}
for(int i=0;i<5;i++)
	sum=sum+marks[i];
ave=sum/10;
	{cout<<"average ="<<ave<<endl;}
system("pause");
	return 0;
}
```



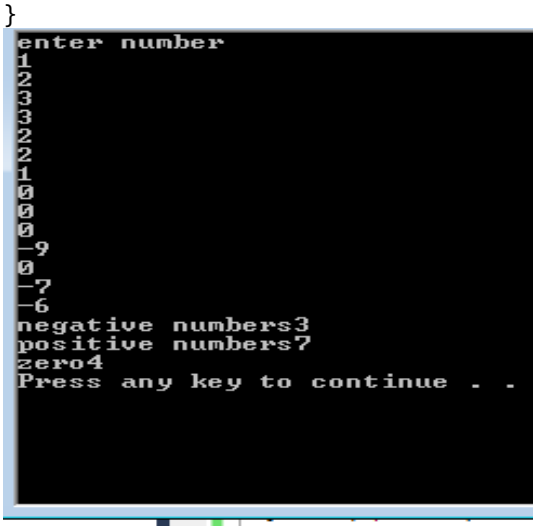
Task #2

```
// 147.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>;
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{
int key ,c=0 ;
int a[15];
cout<<"enter key"<<endl;
cin>>key;

for( int i=0;i<=14;i++)
{cout<<"enter"<<"numbers"<<endl;
cin>>a[i];
}
if(a[15]==key)
	{cout<<c++;
cout<<"total same values"<<c<<endl;}
else
	cout<<"it is not present"<<endl;
system("pause");
	return 0;
}
```



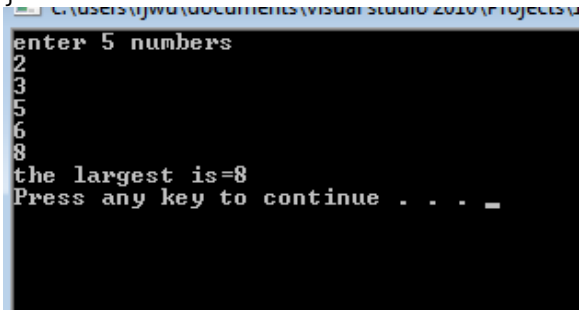
Task #3

```
// gsdgfd.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{int np=0,nn=0,nz=0;
int a[13];
cout<<"enter number"<<endl;
for(int i=0;i<=13;i++)
{
cin>>a[i];

if(a[i]>0){
	np++;}
else if (a[i]==0){
	nz++;}
else  (a[i]<0){
	nn++;}
}
cout<<"negative numbers"<<nn<<endl;
cout<<"positive numbers"<< np<<endl;
cout<<"zero"<<nz<<endl;
system("pause");
	return 0;
}
```



Task #4

```
// 147.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>;
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{int largest=0;
int arr[5];
cout<<"enter 5 numbers"<<endl;
for(int i=0;i<5;i++)
{cin>>arr[i];
if(arr[i]>largest){
	largest=arr[i];
}
}
cout<<"the largest is="<<largest<<endl;


system("pause");
	return 0;
}
```



Task #5

```
// 147.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>;
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{int arr[20];
int arr1[10];
int arr2[10];
cout<<"enter 20 numbers"<<endl;
for(int i=0;i<20;i++)
{cin>>arr[i];
}
for(int i=0;i<10;i++)
{arr1[i]=arr[i];
arr2[i]=arr[i +10];
}
cout<<"array =1";
for(int i=0;i<10;i++){
	cout<<arr1[i]<<" ";
}cout<<endl;
cout<<"array =2";
for(int i=0;i<10;i++){
	cout<<arr2[i]<<" ";}
cout<<endl;
system("pause");
	return 0;
}
```

```
enter 20 numbers
1
2
3
4
5
6
7
8
9
74
85
96
32
12
14
25
36
98
74
32
array =11 2 3 4 5 6 7 8 9 74
array =285 96 32 12 14 25 36 98 74 32
Press any key to continue . . .
```

LAB #8

Task#1;

```
// klkl.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;

int main()
{int A[2][3];
for(int i=0;i<2;i++)
{
	for(int j=0;j<3;j++)
	{cout<<"enter value at index  \t"<<i<<j<<endl;
	cin>>A[i][j];
	}}
for(int w=0;w<2;w++)
{
	for(int x=0;x<3;x++)
	{cout<<"\t"<<A[w][x];
	}}
	cout<<endl;
	system("pause");
	return 0;
}
```

```
enter value at index    00
2
enter value at index    01
3
enter value at index    02
1
enter value at index    10
5
enter value at index    11
6
enter value at index    12
4
        2       3       1       5       6       4
Press any key to continue . . .
```

Task#2;

```
#include<iostream>
using namespace std;
int main()
{
    int mat1[3][3], mat2[3][3], i, j, mat3[3][3];
    cout<<"Enter Elements of First Matrix: ";
    for(i=0; i<3; i++)
    {
        for(j=0; j<3; j++)
              {  cin>>mat1[i][j];}
    }
    cout<<"Enter Elements of Second Matrix: ";
    for(i=0; i<3; i++)
    {
        for(j=0; j<3; j++)
              { cin>>mat2[i][j];}
    }
    cout<<"\nAdding the Two Given Matrix...\n";
    for(i=0; i<3; i++)
    {
        for(j=0; j<3; j++)
              { mat3[i][j] = mat1[i][j]+mat2[i][j];}
    }
    cout<<"Addition Result of Two Given Matrix is:\n";
    for(i=0; i<3; i++)
    {
        for(j=0; j<3; j++)
         {   cout<<mat3[i][j]<<" ";
              cout<<endl;}
    }
       system("pause");
    return 0;
```

```
Enter Elements of First Matrix: 1 2 3
                                4 5 6
                                1 2 3
Enter Elements of Second Matrix: 2 3 4
                                 1 2 3
                                 4 5 2

Adding the Two Given Matrix...
Addition Result of Two Given Matrix is:
3 5 7
5 7 9
5 7 5
Press any key to continue . . .
```

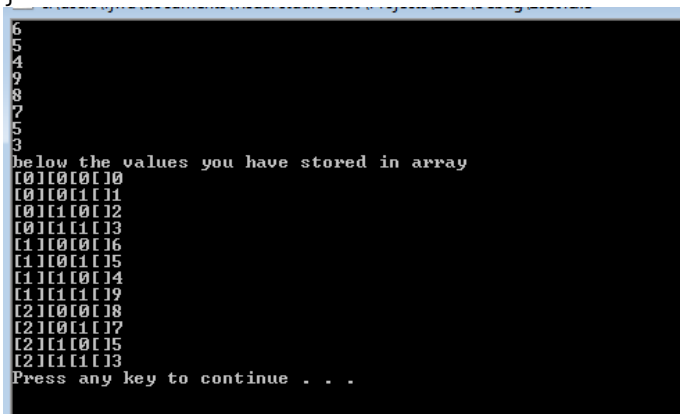
Task #3

```
#include<iostream>
using namespace std;
int main()
{
    int mat1[6][6], mat2[6][6], i, j, mat3[6][6];
    cout<<"Enter Elements of First Matrix: ";
    for(i=0; i<6; i++)
    {
        for(j=0; j<6; j++)
              {  cin>>mat1[i][j];}
    }
    cout<<"Enter Elements of Second Matrix: ";
    for(i=0; i<6; i++)
    {
        for(j=0; j<6; j++)
              { cin>>mat2[i][j];}
    }
    cout<<"\nAdding the Two Given Matrix...\n";
    for(i=0; i<6; i++)
    {
        for(j=0; j<6; j++)
              { mat3[i][j] = mat1[i][j]-mat2[i][j];}
    }
    cout<<"Addition Result of Two Given Matrix is:\n";
    for(i=0; i<6; i++)
    {
        for(j=0; j<6; j++)
         {   cout<<mat3[i][j]<<" ";
              cout<<endl;}
    }
       system("pause");
    return 0;
}
```

```
Enter Elements of First Matrix: 1 2 3 4 5 6
                                1 2 3 4 5 6
                                1 2 3 4 5 6
                                1 1 1 1 1 1
                                2 2 2 2 2 2
                                3 3 3 3 3 3
Enter Elements of Second Matrix: 1 1 1 1 1 1
                                 1 2 3 4 5 6
                                 2 2 2 2 2 2
                                 0 0 0 0 0 0
                                 1 1 1 1 1 1
                                 2 2 2 2 2 2

subtracting the Two Given Matrix...
subtraction Result of Two Given Matrix is:
0 1 2 3 4 5
0 0 0 0 0 0
-1 0 1 2 3 4
1 1 1 1 1 1
1 1 1 1 1 1
1 1 1 1 1 1
Press any key to continue . . .
```

Task#4

```
// 2010.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{int array[3][2][2];
cout<<"enter  12 values";
for(int i=0;i<3;i++)
{for(int j=0;j<2;j++)
{ for(int k=0;k<2;k++)
{cin>>array[i][j][k];
}
}
}
cout<<"below the values you have stored in array"<<endl;
for(int i=0;i<3;i++)
{for(int j=0;j<2;j++)
{ for(int k=0;k<2;k++)
cout<<"["<<i<<"]"<<"["<<j<<"["<<k<<"["<<"]"<<array[i][j][k]<<endl;
}
}


system("pause");
	return 0;
}
```



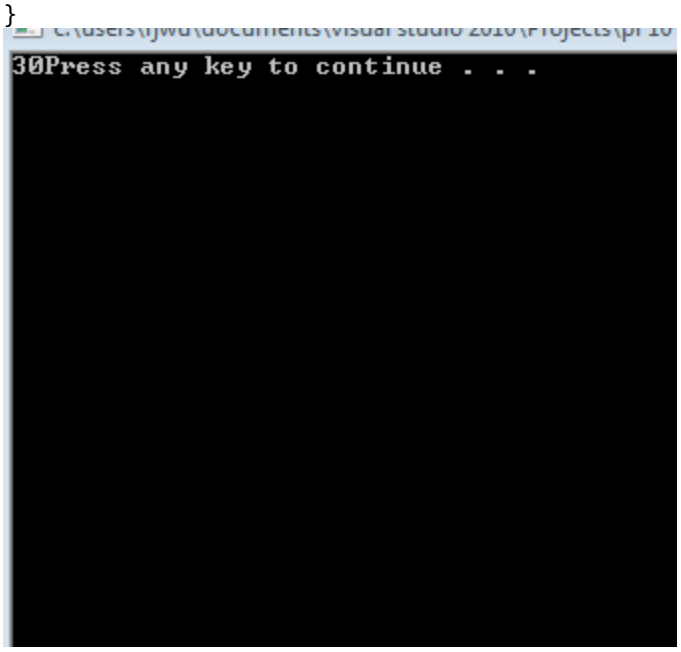
LAB #9

Task 1:

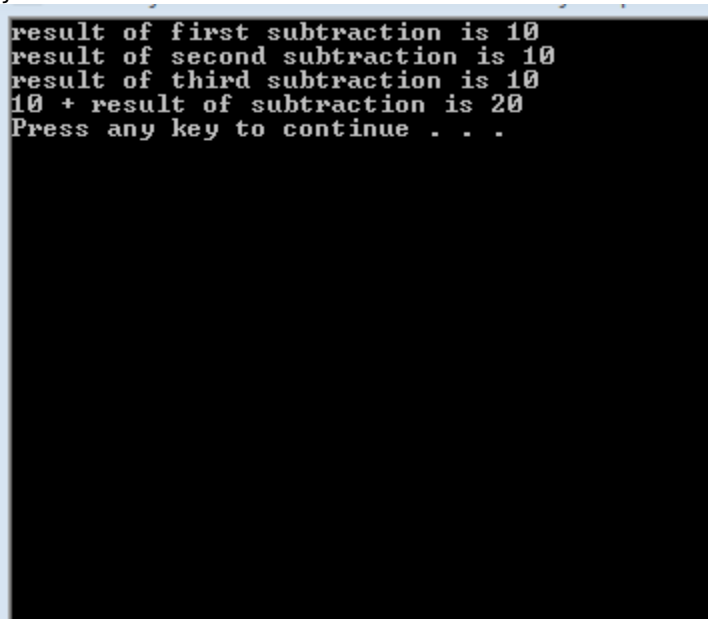
Sample 1:

```
#include "stdafx.h"
#include<iostream>
using namespace std;
void print(); // function declaration
void print() // function definition
{
 cout<<"i am in function"<<endl;
}
int _tmain(int argc, _TCHAR* argv[])
{ print();
system("pause");
return 0;
}
```

```
#include "stdafx.h"
#include<iostream>
using namespace std;
int sum(int,int); // function declaration
int sum(int x,int y) // function definition
{
 return x+y;
}
int _tmain(int argc, _TCHAR* argv[])
{ int a=10;
 int b=20;
int z;
 z= sum(a,b); //function calling
 cout<<z;
 system("pause");
return 0;
}
```



```
#include "stdafx.h"
#include<iostream>
using namespace std;
int sub(int x,int y)
 { int z;
 z=x-y;
 return z; }
int _tmain(int argc, _TCHAR* argv[])
{
int a=20,b=10,c=5,d,e,f;
 d=sub(a,b);
 cout<<"result of first subtraction is "<<d<<endl;
 e=sub(20,10);
 cout<<"result of second subtraction is "<<e<<endl;
 cout<<"result of third subtraction is "<<sub(20,10)<<endl;
 f=10+sub(a,10);
 cout<<"10 + result of subtraction is " <<f<<endl;
 system("pause");
return 0;
}
```



Task#2:

Give answers to the following:

1. **Write the declartion of a function named: power, to compute x^n.**
   Void _power(x ,n)
2. **Call the function: int factorial(int) ;**
   factorial(a);

3. Which of these are valid function declarations:

A void function();

B void function(void);

C void function(int);

D function(int);

E int function();

A ,b ,c ,e are valid

Task 2 :

Write the output of the following code fragments.

1. int square(int);

int main()

{

for(int i=0;i<10;i+=2)

cout << square(i) << endl;

return 0;

}

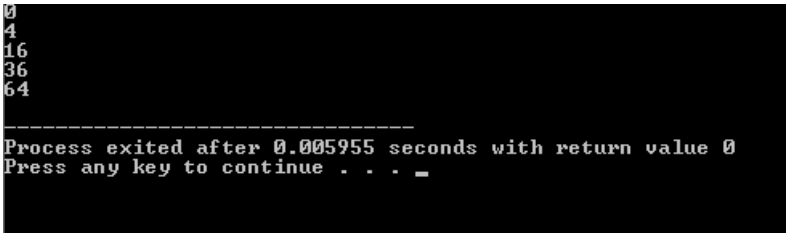
int square(int a)

{

return a*a;

}

Output:



2. int minimum(int,int);

int main()

{

int x=10,y=5;

int m = minimum(x,y);

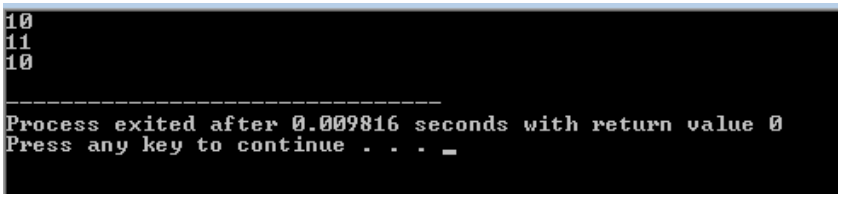
cout<<m<<endl;

return 0;

}

```
int minimum(int a,int b)
{
if (a&lt;b)
return a;
else
return b;

}
```

Output:



3.

```
void increment(int);
int main()
{
int x=10;
cout&lt;&lt; x &lt;&lt;endl;
increment(x);
cout&lt;&lt; x &lt;&lt;endl;
return 0;
}
```

```
void increment(int x)

{

x++;

cout&lt;&lt; x &lt;&lt;endl;
```

output:

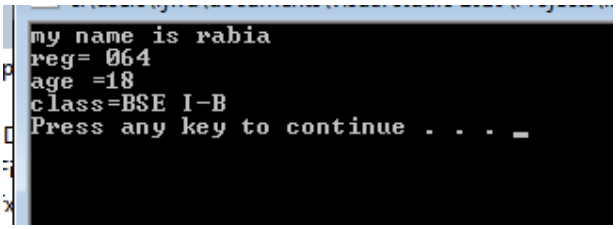

```
}
```

Task#3:

Create a function which display your Name , Reg no, Class, Section.

Display all the things within the body of function, call the function in main.

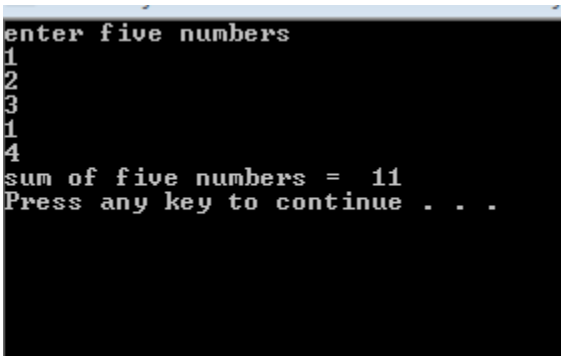
```
// lkj.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;
void display();

int _tmain(int argc, _TCHAR* argv[])
{
	display();
	system("pause");
	return 0;
}
void display()
{
	cout<<"my name is rabia"<<endl;
	cout<<"reg= 064"<<endl;
	cout<<"age =18"<<endl;
	cout<<"class=BSE I-B"<<endl;
}
```



Task#4:

Create a function SUM in C++ which calculates and return the sum of 5 numbers entered by user.

```
// lkj.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;
int sum(int,int,int,int,int);

int _tmain(int argc, _TCHAR* argv[])
{
	int a,b,c,d,e,s;
	cout<<"enter five numbers"<<endl;
	cin>>a;
	cin>>b;
	cin>>c;
	cin>>d;
	cin>>e;
s =  sum(a,b,c,d,e);
cout<<"sum of five numbers =  "<<s<<endl;
	system("pause");
	return 0;
}
int sum(int k,int l ,int m,int n,int o)
{
	int sum=0;
	sum=k+l+m+n+o;
	return sum;
}
```

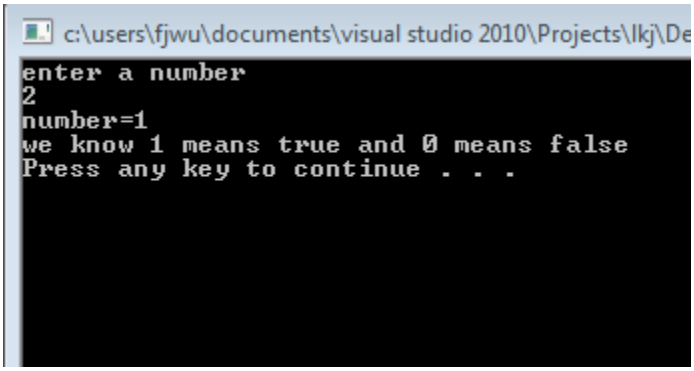


Task#5:

Create a function is_even which take a number as argument, return TRUE if number is even.

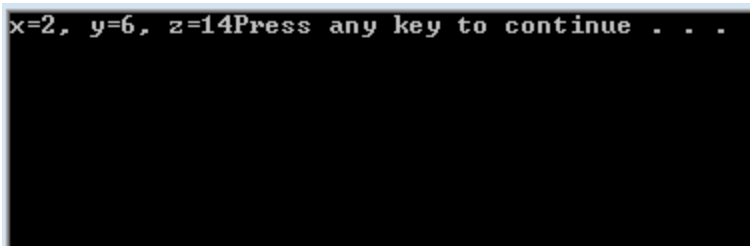
Take number from user at run time.

```
// lkj.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;
int even(int);

int _tmain(int argc, _TCHAR* argv[])
{
	int a,s;
	cout<<"enter a number"<<endl;
	cin>>a;

s =  even(a);
cout<<"number="<<s<<endl;
cout<<"we know 1 means true and 0 means false"<<endl;
	system("pause");
	return 0;
}

bool b1= true;
 bool b2=false;
 int even(int k)
 {
	if( k%2==0)
		return b1;
	else
		return b2;

}
```



Lab#10:
Task#1:
Compile all sample programs

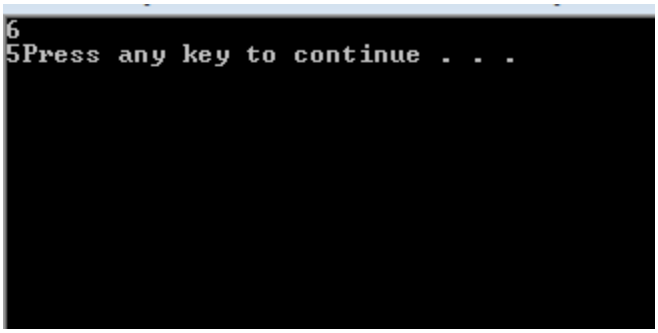
```
#include "stdafx.h"
#include<iostream>
using namespace std;
void duplicate (int& a, int& b, int& c)
{
  a=a*2;
  b=b*2;
  c=c*2;
}


int _tmain(int argc, _TCHAR* argv[])
{
	int x=1, y=3, z=7;
	 duplicate (x, y, z);
	cout << "x=" << x << ", y=" << y << ", z=" << z;
	system("pause");
	return 0;
}
```



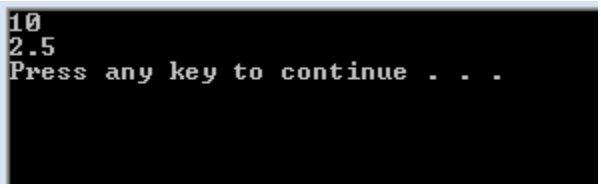

```
#include "stdafx.h"
#include<iostream>
using namespace std;
void prevnext (int x, int& prev, int& next)
{
  prev = x-1;
  next = x+1;
}


int _tmain(int argc, _TCHAR* argv[])
{
	 int x=100, y, z;
  prevnext (x, y, z);
  cout << "Previous=" << y << ", Next=" << z;

	system("pause");
	return 0;
```

```
}
Previous=99, Next=101Press any key to continue .
```

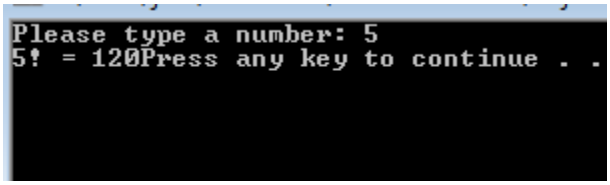
```
#include "stdafx.h"
#include<iostream>
using namespace std;
int divide (int a, int b=2)
{
  int r;
  r=a/b;
  return r;
        }


int _tmain(int argc, _TCHAR* argv[])
{
       cout << divide (12);
       cout << endl;
       cout << divide (20,4);
       system("pause");
       return 0;
}
```



```cpp
#include "stdafx.h"
#include<iostream>
using namespace std;
int operate (int a, int b)
{
  return a*b;
}

float operate (float a, float b)
{
  return a/b;
}



int _tmain(int argc, _TCHAR* argv[])
{

	int x=5,y=2;
	float n=5.0,m=2.0;
	cout << operate (x,y);
	cout << "\n";
	 cout << operate (n,m);
	cout << "\n";

	system("pause");
	return 0;
}
```



```
#include "stdafx.h"
#include<iostream>
using namespace std;

int fact (int a)
{
  if (a==0)
   return 1;
  else
   return a*fact(a-1);
}


int _tmain(int argc, _TCHAR* argv[])
{
       int n;
  cout << "Please type a number: ";
  cin >> n;
  cout << n << "! = " << fact (n);


       system("pause");
       return 0;
}
```



Task#2

Create a program with a function which calculate the square of both the values entered by user. (Using call be reference)

```
// njhg.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;
void square(int& a,int& b);


int _tmain(int argc, _TCHAR* argv[])
{int x=5,y=10;
square( x, y);
cout<<"x="<<x<<endl<<"y="<<y<<endl;
system("pause");
       return 0;
}
void square(int& a,int& b)
{
       a=a*a;
       b=b*b;
}
```

```
x=25
y=100
Press any key to continue . . .
```

Task #3

Write a program with a function volume( ) to calculate the volume of a cube. Use Function

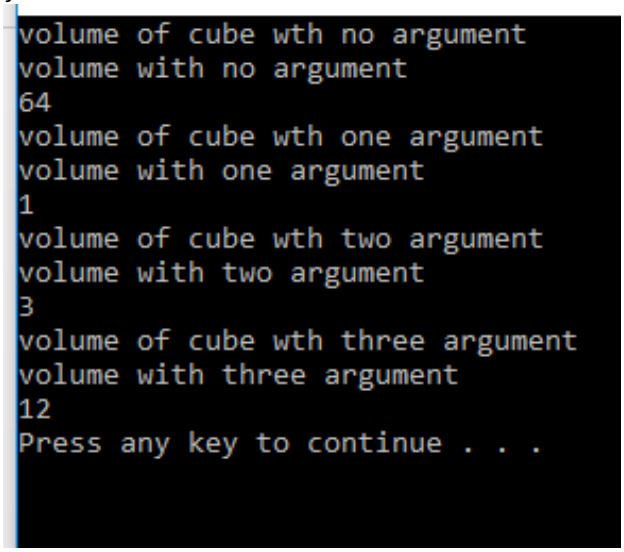
Overloading concept .Call this function with zero, one, two and three arguments and display the

volume returned in the main( ). Use length of side =1 for definition with no arguments.

v= ,s = length of side

```
// njhg.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;
int volume();
int volume(int a);
int volume(int a,int b);
int volume(int a,int b,int c);



int _tmain(int argc, _TCHAR* argv[])
{int x=1,y=3,z=4,s;
cout<<"volume of cube wth no argument"<<endl;
s=volume();
cout<<"volume with no argument"<<endl<<s<<endl;
cout<<"volume of cube wth one argument"<<endl;
s= volume(x);
cout<<"volume with one argument"<<endl<<s<<endl;
cout<<"volume of cube wth two argument"<<endl;
s=volume(x,y);
cout<<"volume with two argument"<<endl<<s<<endl;
cout<<"volume of cube wth three argument"<<endl;
s=volume(x,y,z);
cout<<"volume with three argument"<<endl<<s<<endl;

system("pause");
	return 0;
}
int volume()
{int s,y=4;
s=y*y*y;
return s;
}
```

```
int volume(int a)

{int s;
s=a*a*a*a;
return s;
}
int volume(int a,int b)

{int s;
s=a*a*b*a;
return s;
}
int volume(int a,int b,int c)

{int s;
s=a*a*b*c;
return s;
}
```



Task#4

Perform Task # 03 by using Default value concept call the function with 0,1, 2 and 3 Arguments

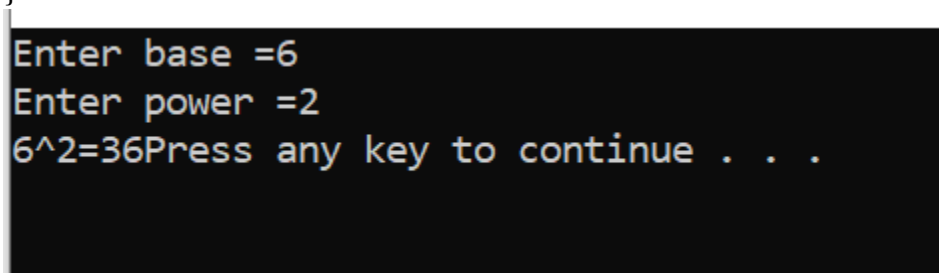
```
#include "stdafx.h"
#include<iostream>
using namespace std;
int vol(int s=5);// default funcion parameter
int _tmain(int argc, _TCHAR* argv[])
{ int s;
cout<<"volume of a cube"<<endl;
cout<<"Enter length of sides=";
cin>>s;// if user not enter a value function will use default parameter
cout<<"volume of cube="<<vol(s);
system ("pause");
```

```
        return 0;
}
int vol(int s)
{int c=s*s*s;
        return c;
}
```

```
volume of a cube
Enter length of sides=1
volume of cube=1Press any key to continue .
```

Task 5

```
int calculatepower(int base,int power);
int main()
{
	int base,power,result;
	cout<<"Enter base =";
	cin>>base;
	cout<<"Enter power =";
	cin>>power;
	result=calculatepower(base,power);
	cout<<base<<"^"<<power<<"="<<result;
	system ("pause");
	return 0;
}
int calculatepower(int base,int power)
{
	if(power==0)
		return 1;
	else
		return base*calculatepower(base,power-1);
}
```

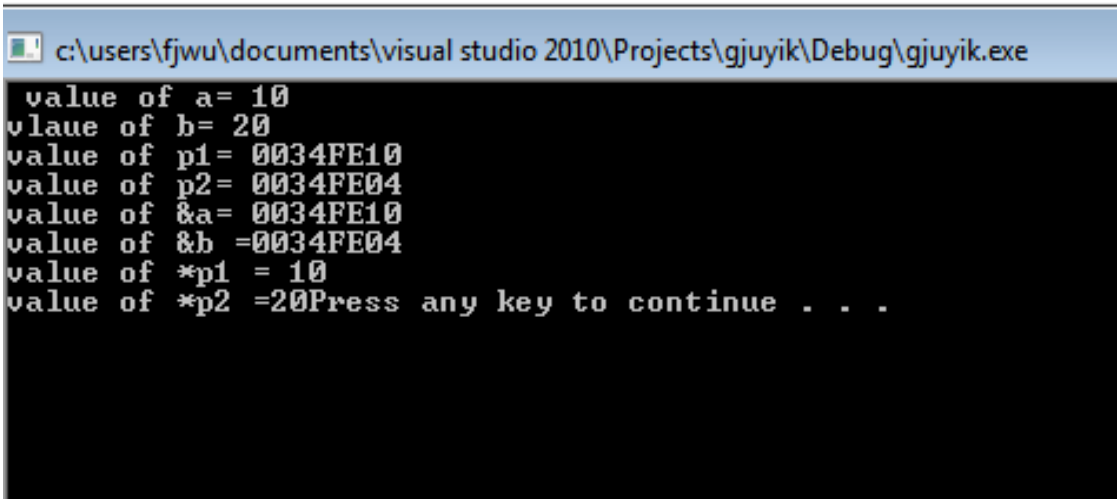


Lab#11

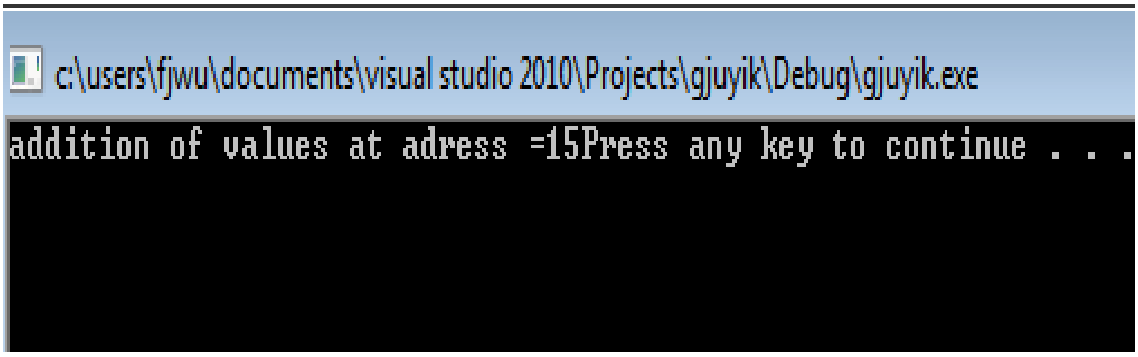
TASK #01

```
// gjuyik.cpp : Defines the entry point for the console application.
//
#include "stdafx.h"
#include< iostream >
using namespace std;
int main()
{
int *p1,*p2; int a=10,b=20; p1=&a; p2=&b;
cout<<" value of a= "<< a;
cout<<" \nvlaue of b= "<< b;
cout<<" \nvalue of p1= "<< p1;
cout<<" \nvalue of p2= "<< p2;
cout<<" \nvalue of &a= "<< &a;
cout<<" \nvalue of &b ="<< &b;
cout<<" \nvalue of *p1 = " <<*p1;
cout<<" \nvalue of *p2 ="<<*p2 ;
system("pause");
}
```

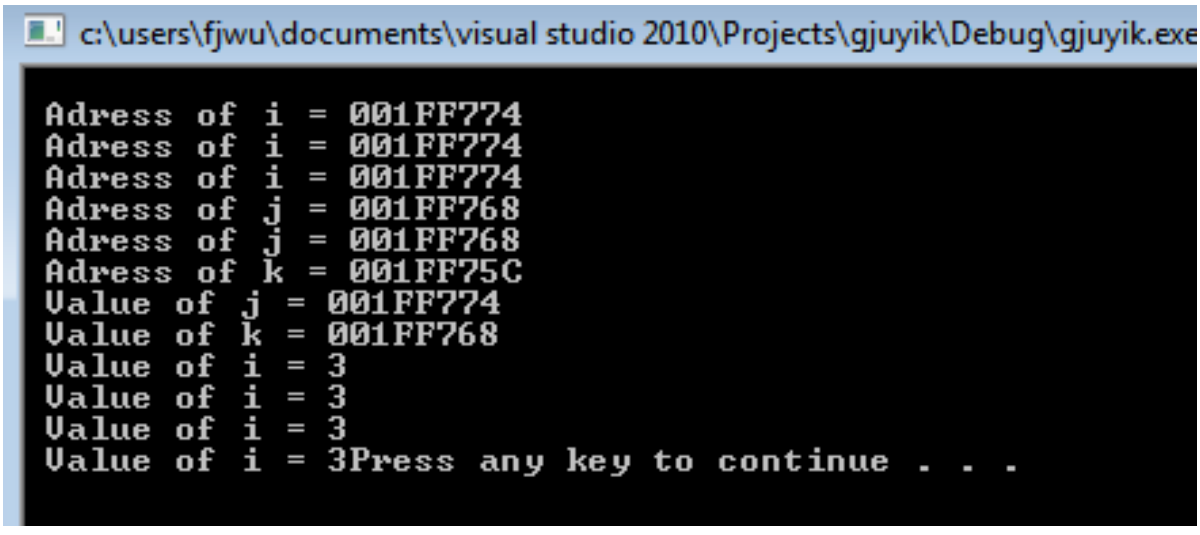
OUTPUT:




```
// gjuyik.cpp : Defines the entry point for the console application.
//
#include "stdafx.h"
#include< iostream >
using namespace std;
int main()
{
int a=5,b=10,c,*p1,*p2,*s;
p1=&a; p2=&b; s=&c;
*s=*p1+*p2;
cout<<"addition of values at adress =" <<*s;
system("pause") ;
return 0;
}
```




```
// gjuyik.cpp : Defines the entry point for the console application.
//
#include "stdafx.h"
#include< iostream >
using namespace std;
int main()
{   int i=3,*j,**k;   j=&i;   k=&j;
  cout<<"\n Adress of i = "<< &i;
  cout<<"\n Adress of i = "<< j;
  cout<<"\n Adress of i = "<< *k;
  cout<<"\n Adress of j = "<< &j;
  cout<<"\n Adress of j = "<< k;
  cout<<"\n Adress of k = "<< &k;
  cout<<"\n Value of j = "<< j;
  cout<<"\n Value of k = "<< k;
  cout<<"\n Value of i = "<< i;
  cout<<"\n Value of i = "<<*( &i);
  cout<<"\n Value of i = "<< *j;
  cout<<"\n Value of i = "<< **k;
  system("pause") ;
  return 0;
}
```

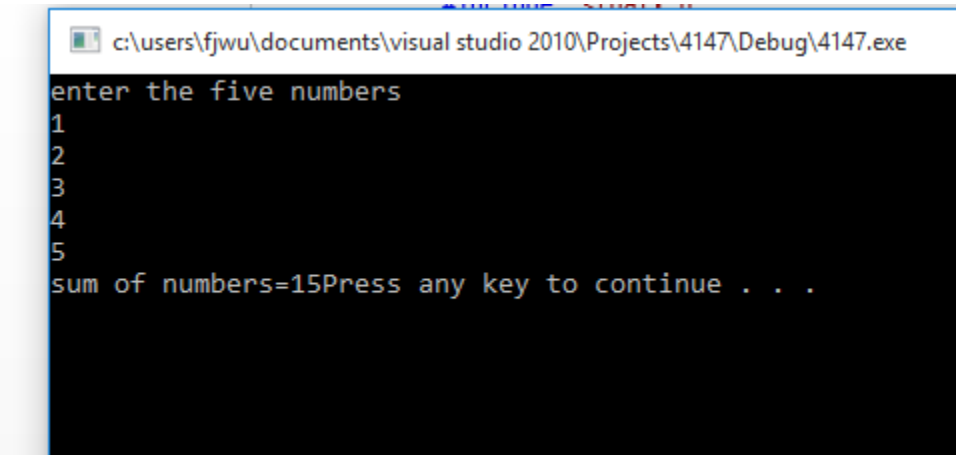


Task#2:

Create a C++ program to find the sum of 5 numbers using pointers

Code:

```
// 4147.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{int a,b,c,d,e,*ptr1,*ptr2,*ptr3,*ptr4,*ptr5,*s,k;
cout<<"enter the five numbers"<<endl;
cin>>a;
cin>>b;
cin>>c;
cin>>d;
cin>>e;
ptr1=&a;
ptr2=&b;
ptr3=&c;
ptr4=&d;
ptr5=&e;
s=&c;
*s=*ptr1+*ptr2+*ptr3+*ptr4+*ptr5;
cout<<"sum of numbers="<<*s;
system("pause");
	return 0;
}
```

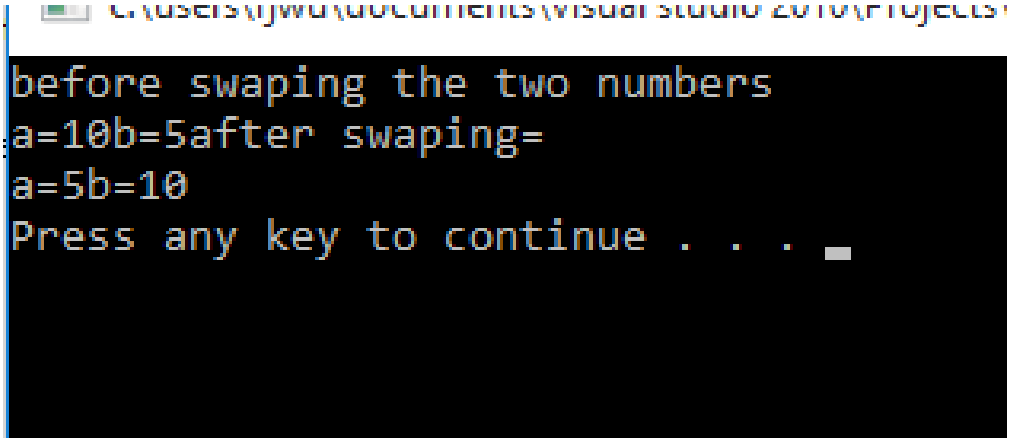


Task#3:

Create a C++ program to swap the values of two variables using pointer notation.

Code:

```
// 4147.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{int a=10,b=5,c=0,*ptr1,*ptr2,*ptr3;
cout<<"before swaping the two numbers"<<endl<<"a="<<a<<"b="<<b;
ptr1=&a;
ptr2 =&b;
ptr3=&c;
*ptr3=*ptr1;
*ptr1=*ptr2;
*ptr2=*ptr3;
cout<<"after swaping="<<endl<<"a="<<a<<"b="<<b<<endl;
system("pause");
	return 0;
}
```



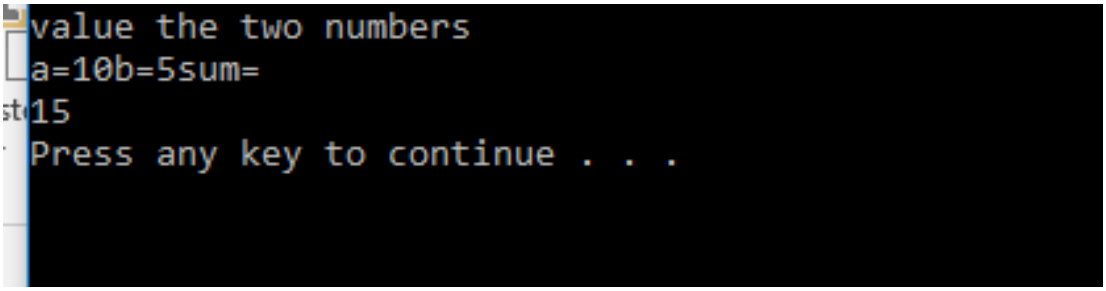
Task#4:

Using the concept of pointer to pointer create a program which add two float values

*(*p1)+*(*p2)

Code:

```
// 4147.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{float a=10.0,b=5.0,*ptr1,*ptr2,**ptrs1,**ptrs2,*ptrs,s;
cout<<"value the two numbers"<<endl<<"a="<<a<<"b="<<b;
ptr1=&a;
ptr2 =&b;
ptrs =&s;
ptrs1=&ptr1;
ptrs2=&ptr2;
*ptrs=**ptrs1+**ptrs2;
cout<<"sum="<<endl<<*ptrs<<endl;
system("pause");
	return 0;
}
```



Task#4:

COMPILE a C++ program to find the largest number from the array of 7 numbers using pointer

Code:

```
// 4147.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{int arr[7],max,*ptr;
ptr=&max;
cout<<" enter value the  numbers"<<endl;
for(int i=0;i<7;i++)
{cin>>arr[i];
}max=arr[0];
for(int i=1;i<7;i++)
{if(max<arr[i])
max=arr[i];
```

```
}
cout<<"maximum number of array ="<<*ptr<<endl;

system("pause");
	return 0;
}
```

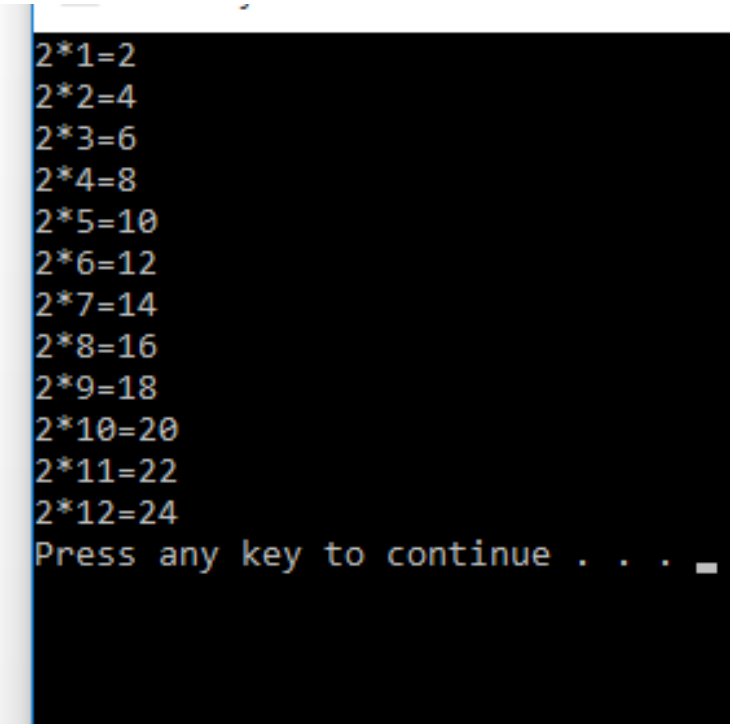
```
 enter value the  numbers
5
1
2
0
17
1
0
maximum number of array =17
Press any key to continue . . .
```

Task#6;

Create a program which print the table of 2 upto 12 using pointers.

Code:

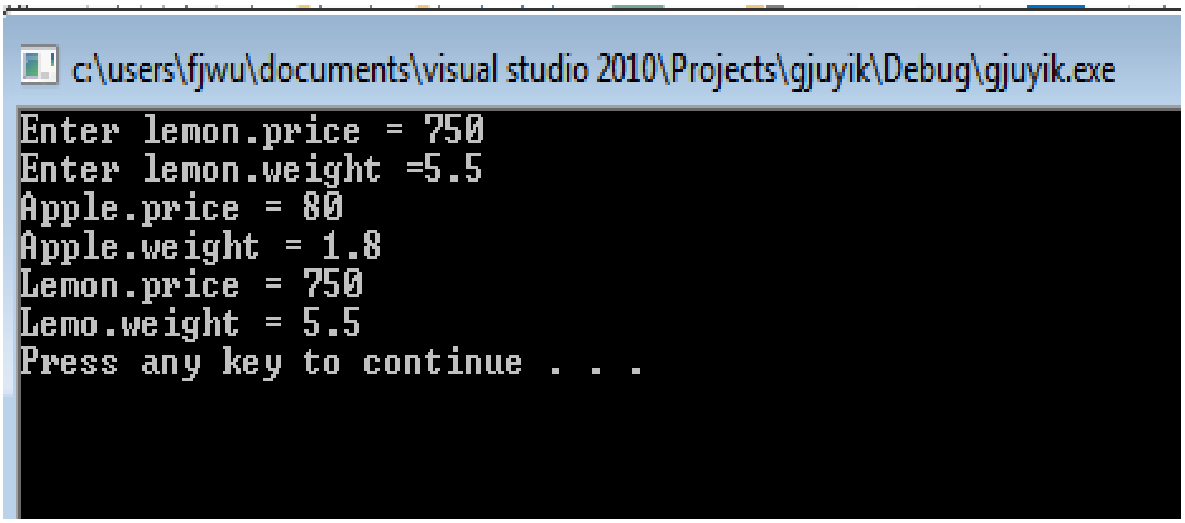
```
// 4147.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
using namespace std;

int _tmain(int argc, _TCHAR* argv[])
{int tab=2,i,res,*ptrtab,*ptri,*ptrres;
ptrtab=&tab;
ptri=&i;
ptrres=&res;
for(i=1;i<=12;i++)
{res=tab*i;
cout<<*ptrtab<<"*"<<*ptri<<"="<<*ptrres<<endl;
}

system("pause");
	return 0;
}
```



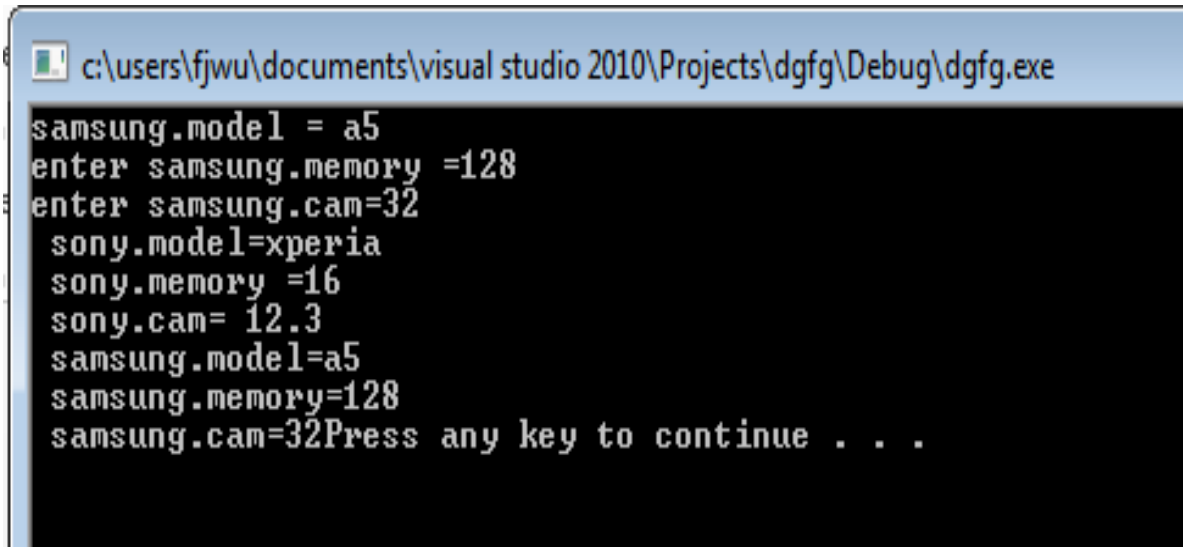
LAB#12

TASK#01

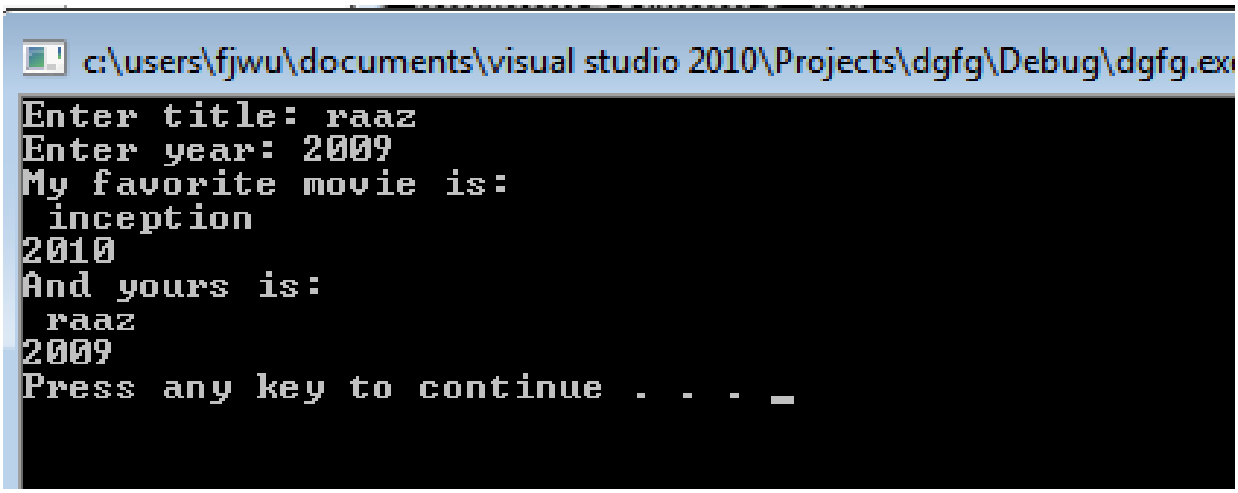
```
// gjuyik.cpp : Defines the entry point for the console application.
//
#include "stdafx.h"
#include< iostream >
using namespace std;
struct product { int price;   float weight;
} apple,lemon;
int _tmain(int argc, _TCHAR* argv[])
{    apple.price=80;
apple.weight=1.8;
cout<<"Enter lemon.price = ";
  cin>>lemon.price;
  cout<<"Enter lemon.weight =";
  cin>>lemon.weight;
   cout<<"Apple.price = " <<apple.price<<endl;
   cout<<"Apple.weight = " <<apple.weight<<endl;
   cout<<"Lemon.price = "<< lemon.price<<endl;
   cout<<"Lemo.weight = "<< lemon.weight<<endl;
   system("pause") ;
   return 0;
}
```




```
// dgfg.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include< iostream >
using namespace std;
struct mobile
{ char model[20];
int memory;   float cam;
} sony={"xperia",16,12.3},samsung;
int _tmain(int argc, _TCHAR* argv[])
{ cout<<"samsung.model = ";
  cin>>samsung.model;
  cout<<"enter samsung.memory =";
  cin>>samsung.memory;
  cout<<"enter samsung.cam=";
  cin>>samsung.cam;
  cout<<" sony.model="<<sony.model<<"\n sony.memory ="<<sony.memory<<"\n sony.cam=
"<<sony.cam ;
 cout<<"\n samsung.model=" <<samsung.model<<"\n samsung.memory=" <<samsung.memory<<"\n
samsung.cam="<< samsung.cam;
system("pause") ;
       return 0;
}
```



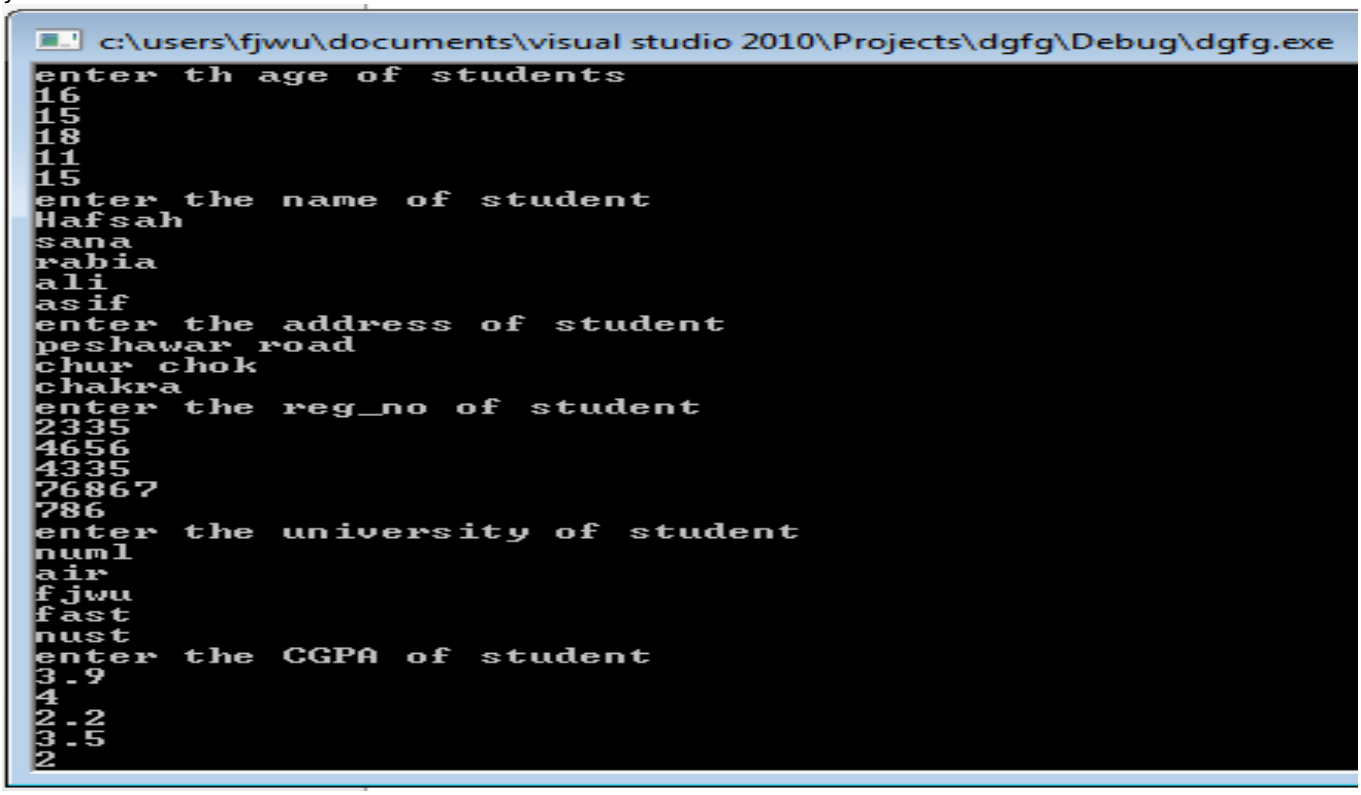

```
// dgfg.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include < iostream >
using namespace std;
struct Movies
{   char title[50];   int year;
} mine={"inception",2010}; void printmovie (Movies movie);
int _tmain(int argc, _TCHAR* argv[])
{ Movies yours;
  cout << "Enter title: ";
  cin >> yours.title;
  cout << "Enter year: ";
  cin  >> yours.year;
  cout << "My favorite movie is:\n ";
 printmovie (mine);
 cout << "And yours is:\n ";   printmovie (yours);
 system("pause") ;
 return 0;
}
void printmovie (Movies movie)
{
  cout << movie.title <<endl;   cout <<  movie.year << endl;
}
```



TASK#02

```
// dgfg.cpp : Defines the entry point for the console application.
//

#include "stdafx.h"
#include<iostream>
#include<string>
using namespace std;
    struct student
       {
              string name;
              int age;
              string address;
              int reg_no;
              string university;
              float CGPA;
       }S1,S2,S3,S4,S5;

int _tmain(int argc, _TCHAR* argv[])
       {
              S1.age,S2.age,S3.age,S4.age,S5.age;
              cout<<"enter th age of students"<<endl;
              cin>>S1.age>>S2.age>>S3.age>>S4.age>>S5.age;
              S1.name,S2.name,S3.name,S4.name,S5.name;
              cout<<"enter the name of student"<<endl;
              cin>>S1.name>>S2.name>>S3.name>>S4.name>>S5.name;
              S1.address,S2.address,S3.address,S4.address,S5.address;
              cout<<"enter the address of student"<<endl;
              cin>>S1.address>>S2.address>>S3.address>>S4.address>>S5.address;
              S1.reg_no,S2.reg_no,S3.reg_no,S4.reg_no,S5.reg_no;
              cout<<"enter the reg_no of student"<<endl;
              cin>>S1.reg_no>>S2.reg_no>>S3.reg_no>>S4.reg_no>>S5.reg_no;
              S1.university,S2.university,S3.university,S4.university,S5.university;
              cout<<"enter the university of student"<<endl;

       cin>>S1.university>>S2.university>>S3.university>>S4.university>>S5.university;
              S1.CGPA,S2.CGPA,S3.CGPA,S4.CGPA,S5.CGPA;
              cout<<"enter the CGPA of student"<<endl;
```

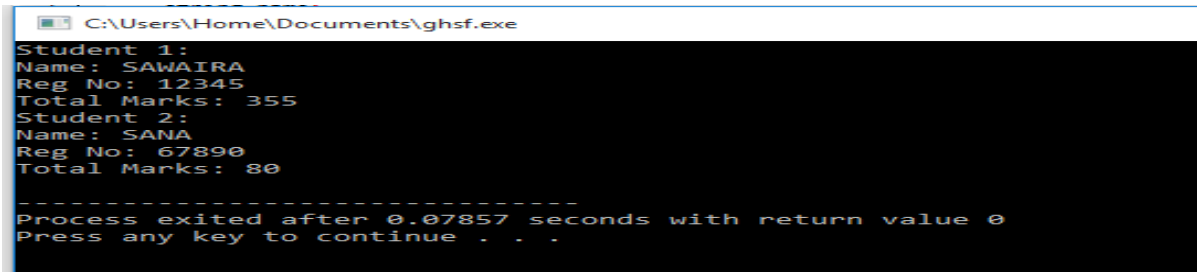
```
            cin>>S1.CGPA>>S2.CGPA>>S3.CGPA>>S4.CGPA>>S5.CGPA;
            cout<<"AGE OF STUDENT"<<S1.age<<S2.age<<S3.age<<S4.age<<S5.age;
            cout<<"namme of students"<<S1.name<<S2.name<<S3.name<<S4.name<<S5.name;
            cout<<"addres of student"<<
      S1.address<<S2.address<<S3.address<<S4.address<<S5.address;
            cout<<"CGPA OF STUDENT"<<S1.CGPA<<S2.CGPA<<S3.CGPA<<S4.CGPA<<S5.CGPA;
            cout<<"REG_ NO OF
STUDENT"<<S1.reg_no<<S2.reg_no<<S3.reg_no<<S4.reg_no<<S5.reg_no;
            cout<<"university name of
student"<<S1.university<<S2.university<<S3.university<<S4.university<<S5.university;

system("pause");
      return 0;
}
```



TASK#03

```
#include <iostream>

#include <string> using

namespace std;

struct result

{

   string name;

int reg_no;     int
```

```
marks[4];    int
total_marks;
};
int main()
{
   result student1 = {"Sawaira", 12345, {85, 90, 92, 88}, 0};    result
student2 = {"sana", 67890, {80, 87, 91, 89}, 0};    for (int i = 0; i < 4;
i++)      {
      student1.total_marks += student1.marks[i];
   }
   for (int i = 0; i < 4; i++)
         {
      student2.total_marks += student2.marks[i];
cout << "Student 1:" << endl;    cout << "Name: " <<
student1.name << endl;    cout << "Reg No: " <<
student1.reg_no << endl;    cout << "Total Marks: " <<
student1.total_marks << endl;

   cout << "Student 2:" << endl;    cout << "Name: " <<
student2.name << endl;    cout << "Reg No: " <<
student2.reg_no << endl;    cout << "Total Marks: " <<
student2.total_marks << endl;
    return 0;
}
```



TASK#04

```
#include <iostream> using
namespace std;
struct flight
{
   int Flight_no;
   int Hours;
int Minutes;
int Seconds;
};

void Display_time(const flight& f)
{
   cout << "Arrival time for flight " << f.Flight_no << ": ";     cout << f.Hours << " hours, " << f.Minutes <<
" minutes, " << f.Seconds << " seconds" << endl;
}

int main()
{     flight f1,
f2;
   cout << "Enter arrival time for flight 1 (hours minutes seconds): ";
cin >> f1.Hours >> f1.Minutes >> f1.Seconds;     f1.Flight_no = 1;

   cout << "Enter arrival time for flight 2 (hours minutes seconds): ";
cin >> f2.Hours >> f2.Minutes >> f2.Seconds;     f2.Flight_no = 2;
```

```
    Display_time(f1);     Display_time(f2);


    return 0;
}
```

```
C:\Users\Home\Documents\ghsf.exe
Enter arrival time for flight 1 (hours minutes seconds): 12 30 12
Enter arrival time for flight 2 (hours minutes seconds): 9  15 9
Arrival time for flight 1: 12 hours, 30 minutes, 12 seconds
Arrival time for flight 2: 9 hours, 15 minutes, 9 seconds

--------------------------------
Process exited after 30.78 seconds with return value 0
Press any key to continue . . .
```