Task-01

Write a program that generates the following output using 1 variable:
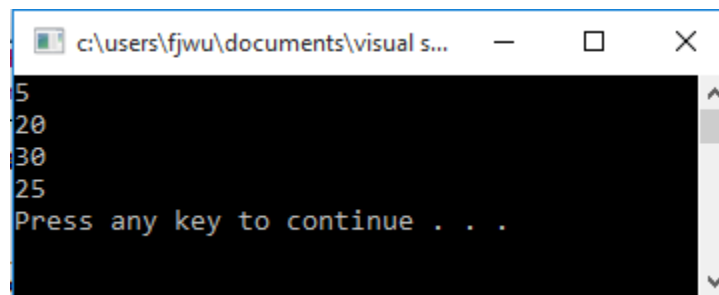
5

20

30

25

Code:

```cpp
#include "stdafx.h"
#include <iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{
    int n=5;
        cout<<n<<endl;
        cout<<n*4<<endl;
        cout<<n*6<<endl;
        cout<<n*5<<endl;
        system("pause");

        return 0;
}
```

Output:

Task-02

Write a C++ code which take two input from user, your program should display the AND of both the values.

Code:

```cpp
#include "stdafx.h"
#include <iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{
    int a,b,c;
    cout<<"enter value of a\n";
    cin>>a;
    cout<<"enter value of b\n";
    cin>>b;
    c=a&&b;
    cout<<"AND of "<<a<<" and "<<b<<" = "<<c<<endl;
    system("pause");

    return 0;
}
```
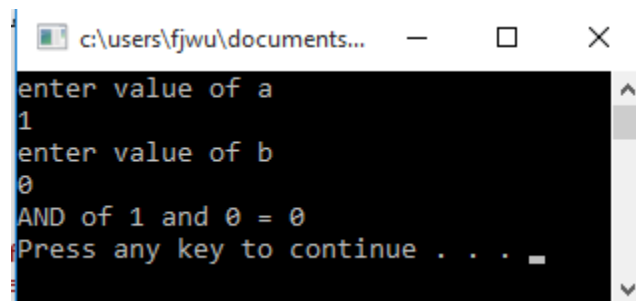
Output:

Task-03

Write a program that prints the truth table of OR Gate. Use relational and logical operators for the result of the truth table. In OR gate, the output will be 1 if at least 1 input is non_zero.

Code:

```cpp
#include "stdafx.h"
#include <iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{
    int a,b,c,d;
    a=0||0;
    b=0||1;
    c=1||0;
    d=1||1;

    cout<<"A\t"<<"B\t"<<"X\n";
    cout<<"0\t"<<"0\t"<<a<<endl;
    cout<<"0\t"<<"1\t"<<b<<endl;
    cout<<"1\t"<<"0\t"<<c<<endl;
}
```

```
    cout<<"1\t"<<"1\t"<<d<<endl;
    system("pause");

    return 0;
}
```

Output:

```
c:\users\fjwu\documen...   —   □   ✕
A          B          X
0          0          0
0          1          1
1          0          1
1          1          1
Press any key to continue . . ._
```

Task-04

If the marks obtained by a student in five different subjects are input through the keyboard, find out the total marks and percentage marks obtained by the student. Assume that the max marks that can be obtained by a student in each subject is 100.

Code:
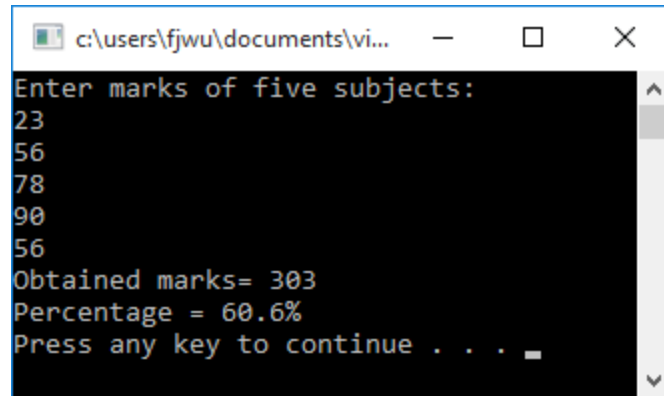
```
#include "stdafx.h"
#include <iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{
    float a,b,c,d,e,t,p;
    cout<<"Enter marks of five subjects:\n";
    cin>>a>>b>>c>>d>>e;
    t=a+b+c+d+e;
    cout<<"Obtained marks= "<<t<<endl;
    p= (t/500)*100;
    cout<<"Percentage = "<<p<<"%"<<endl;
    system("pause");

    return 0;
}
```
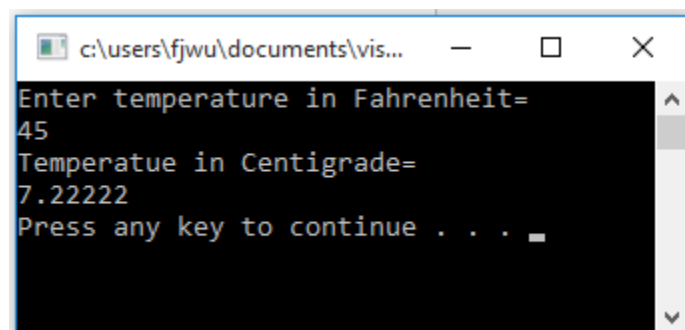
Output:

Task-05

Temperature of a city in Fahrenheit degree is input through the keyboard. Write a program to convert this temperature into centigrade degrees.

C= (F-32)/1.8

Code:

```cpp
#include "stdafx.h"
#include <iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{
        float F,C;
        cout<<"Enter temperature in Fahrenheit= \n";
        cin>>F;
        C=(F-32)/1.8;
        cout<<"Temperatue in Centigrade= \n";
        cout<<C<<endl;
        system("pause");
        return 0;
}
```
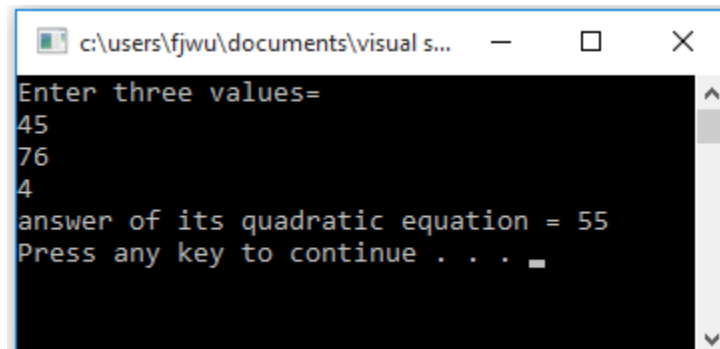
Output:

Task-06

Creat a program which solves quadratic equation. Where a,b,c will be entered by user.

Code:

```cpp
#include "stdafx.h"
#include <iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{
    int a,b,c,d;
    cout<<"Enter three values= \n";
    cin>>a>>b>>c;
    d=(-b+(b*b)-4*a*c)/(2*a);
    cout<<"answer of its quadratic equation = "<<d<<endl;
    system("pause");
    return 0;
}
```
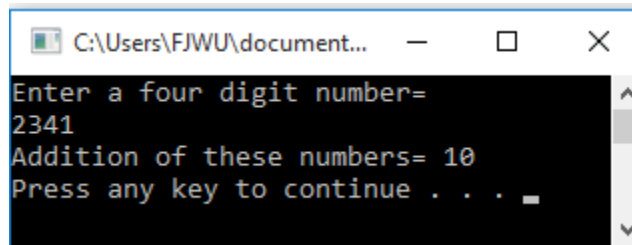
Output:

Task-07

If a four digit number is input through the keyboard, write a program to calculate the sum of its digits.

Code:

```cpp
#include "stdafx.h"
#include <iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{
    int n,a,b,c,add,temp;
    cout<<"Enter a four digit number= "<<endl;
    cin>>n;
    a=n/1000;
```

```
        temp=n%1000;
        b=temp/100;
        temp=temp%100;
        c=temp/10;
        temp=temp%10;
        add=a+b+c+temp;
        cout<<"Addition of these numbers= "<<add<<endl;
        system("pause");
        return 0;
}
```

Output:

```
C:\Users\FJWU\document...    —    □    ×

Enter a four digit number=
2341
Addition of these numbers= 10
Press any key to continue . . . ▄
```