

Task 1:

```
#include<iostream>

using namespace std;

int main()
{
    int num;

    cout<<"please enter month number";

    cin>>num;

    switch(num)
    {
        case 1:
            cout<<"the month is january"<<endl;
            cout<<"the month days are 30"<<endl;
            break;

        case 2:
            cout<<"the month is february"<<endl;
            cout<<"the month days are 28"<<endl;
            break;

        case 3:
            cout<<"the month is march"<<endl;
            cout<<"the month days are 31"<<endl;
            break;

        case 4:
            cout<<"the month is april"<<endl;
            cout<<"the month days are 30"<<endl;
            break;

        case 5:
            cout<<"the month is may"<<endl;
            cout<<"the month days are 31"<<endl;
```

```
break;
```

case 6:

```
cout<<"the month is june"<<endl;
```

```
cout<<"the month days are 30"<<endl;
```

```
break;
```

case 7:

```
cout<<"the month is july"<<endl;
```

```
cout<<"the month days are 31"<<endl;
```

```
break;
```

case 8:

```
cout<<"the month is august"<<endl;
```

```
cout<<"the month days are 31"<<endl;
```

```
break;
```

case 9:

```
cout<<"the month is september"<<endl;
```

```
cout<<"the month days are 30"<<endl;
```

```
break;
```

case 10:

```
cout<<"the month is october"<<endl;
```

```
cout<<"the month days are 31"<<endl;
```

```
break;
```

case 11:

```
cout<<"the month is november"<<endl;
```

```
cout<<"the month days are 30"<<endl;
```

```
break;
```

case 12:

```
cout<<"the month is december"<<endl;
```

```
cout<<"the month days are 31"<<endl;
```

```
break;
```

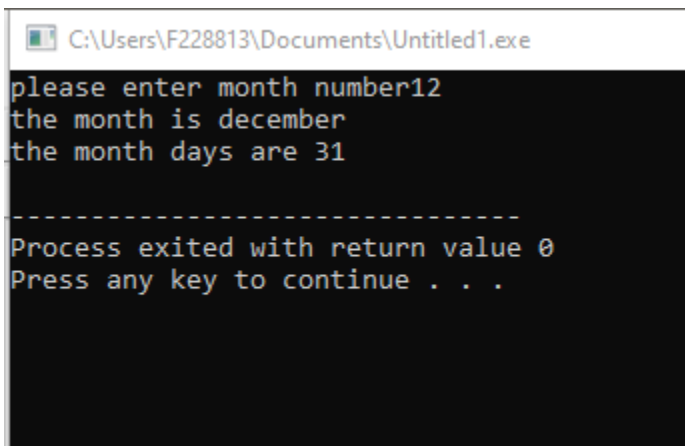
default:

```
cout<<"the month number is not correct"<<endl;
```

```
break;
```

```
}
```

```
}
```



```
C:\Users\F228813\Documents\Untitled1.exe
please enter month number12
the month is december
the month days are 31
-----
Process exited with return value 0
Press any key to continue . . .
```

Task 2:

```
#include<iostream>
```

```
#include<cmath>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    double num1,num2;
```

```
    char func;
```

```
    cout<<"please enter 1st number";
```

```
    cin>>num1;
```

```
    cout<<"please enter 2nd number";
```

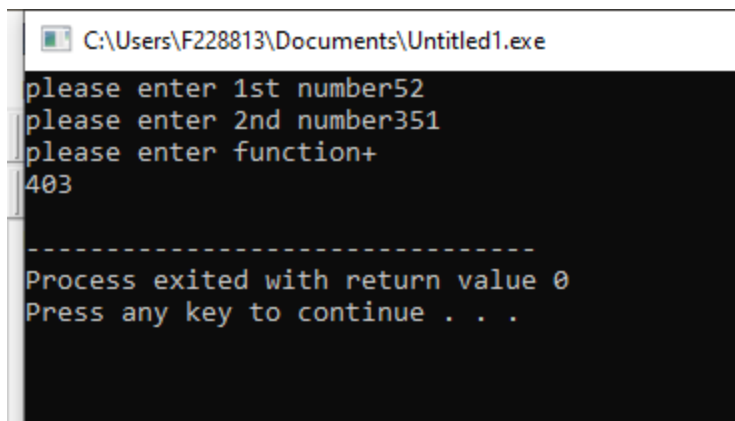
```
    cin>>num2;
```

```
    cout<<"please enter function";
```

```
cin>>func;
switch(func)
{
case '+':
    cout<<num1+num2<<endl;
    break;
case '-':
    cout<<num1-num2<<endl;
    break;
case '*':
    cout<<num1*num2<<endl;
    break;
case '/':
    cout<<num1/num2<<endl;
    break;

default:
    cout<<"the function is not correct"<<endl;
    break;
}

}
```



```
C:\Users\F228813\Documents\Untitled1.exe
please enter 1st number52
please enter 2nd number351
please enter function+
403
-----
Process exited with return value 0
Press any key to continue . . .
```

Task 3:

```
#include<iostream>
#include<assert.h>
using namespace std;
int main()
{

    int num1,num2,fi,sum,c=1;
    cout<<"please enter 1st number";
    cin>>num1;
    cout<<"please enter 2nd number";
    cin>>num2;
    cout<<"please enter fibonacci number";
    cin>>fi;
    cout<<num1<<","<<num2;
    while(fi>=3)
    {
        sum=num1+num2;
        num1=num2;
```


```

        num2=sum;
        cout<<" "<<sum;

        fi--;
    }

}

```


C:\Users\F228813\Documents\Untitled1.exe

```

please enter 1st number1
please enter 2nd number1
please enter fibonacci number12
1,1,2,3,5,8,13,21,34,55,89,144
-----
Process exited with return value 0
Press any key to continue . . .

```

Task 4 :

```

#include<iostream>

#include<assert.h>

using namespace std;

int main()
{

    int c=2,i,num,prime;

    cout<<"please enter number";

    cin>>num;

    prime=true;

    while(c<num)

```

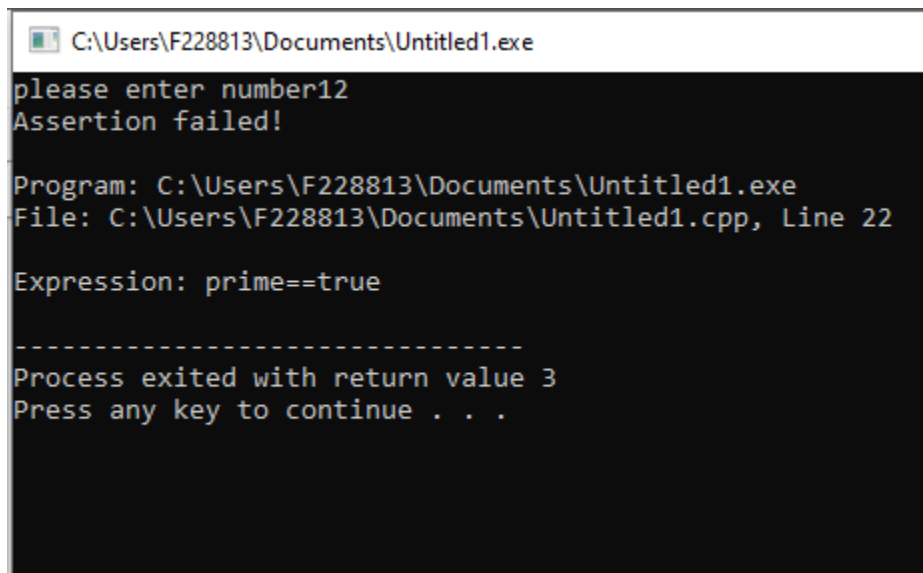
```

    {
        if(num % c==0)
        {
            prime=false;
        }

        c++;
    }

    assert(prime==true);
    cout<<"prime numbers are good";
}

```



The screenshot shows a Windows command prompt window with the title bar "C:\Users\F228813\Documents\Untitled1.exe". The window contains the following text:

```

please enter number12
Assertion failed!

Program: C:\Users\F228813\Documents\Untitled1.exe
File: C:\Users\F228813\Documents\Untitled1.cpp, Line 22

Expression: prime==true

-----
Process exited with return value 3
Press any key to continue . . .

```

Task 5:

```
#include<iostream>
```

```
#include<assert.h>

using namespace std;

int main()
{

    int num1,fac=1;

    cout<<"please enter  number";

    cin>>num1;

    while(num1>=1)
    {

        fac*=num1;

        num1--;

    }

    cout<<"the factorial is:"<<fac;

}
```

 C:\Users\F228813\Documents\Untitled1.exe

```
please enter  number5
the factorial is:120
-----
Process exited with return value 0
Press any key to continue . . .
```