

Assume that you want to check whether the number is prime or not. Write a program that asks for a number repeatedly. When it finishes the calculation the program asks if the user wants to do another calculation. The response can be 'y' or 'n'. Don't forget to use the object class concept.

```
// header file for input and output operation
#include <iostream>
// using standard namespace
using namespace std;
#define SUCESS 0
/*
 * class Number
 */
class Number{
private:
    int num;
public:
    Number(int n){num = n;}
    bool isPrime()
    {
        if (num < 2) // prime no is defined for natural no greater than 2
            return false;
        else
            for (int i = 2; i <= num/2; i++) // brute force all the factor possible
            {
                if (num % i == 0) // i is found to be the factor
                    return false;
            }
        return true;
    }
};
int main()
{
    int temp;
    char choice;
    do
    {
        cout << "Enter no to Check?";
        cin >> temp;
        Number no(temp);
```

```

    if (no.isPrime() )
        cout << "Number is prime" << endl;
    else
        cout << "Number is not prime" << endl;
    cout << "Do you want to continue y/n";
    cin >> choice;
}
while(choice == 'y');
return SUCESS;
}

```

```

#include <iostream>//or
using namespace std;
class prime_check
{

```

```

    private:
        int num;
    public:
        void add_data(int a)
        {
            num=a;
        }
        bool check();
};

```

```

int main()
{
    prime_check pc;
    int x;
    char ch;
    do
    {
        cout<<endl<<"Enter number to check whether it is prime or not:\t";
        cin>>x;
        pc.add_data(x);
        if(pc.check()==true)
        {
            cout<<endl<<"It is prime"<<endl;
        }
        else
        {

```

```

        cout<<"It is not prime"<<endl;
    }
    cout<<"Do you want to do another checking?(y/n)";
    cin>>ch;
}while(ch=='y' || ch=='Y');
return 0;
}
bool prime_check::check()
{
    int flag=0;
    for (int i=2;i<num;i++)
    {
        if((num%i)==0)
        {
            flag=flag+1;           //if the given number is divisible by any number between 2
and (given number - 1) then it is not prime
            break;
        }
    }
    if(flag==0)
    {
        return true;
    }
    else
    {
        return false;
    }
}

```