

Q1

```
⇒ #include <iostream>
using namespace std;
class overload
{
private:
    int a, b;
public:
    overload ()
    {
        a = b = 0;
    }
    overload (int x, int y)
    {
        a = x;
        b = y;
    }
    overload operator - (overload & obj1)
    {
        overload c;
        c.a = a - obj1.a;
        c.b = b - obj1.b;
        return c;
    }
    friend overload operator + (overload &, overload &);
    void show_data ()
    {
        cout << a << " " << b << endl;
    }
};
```

Overload operator γ . (operator & x1, operator & y1)

{

 overload z1;

 z1.a = x1.a γ y1.a;

 z1.b = x1.b γ y1.b;

 return z1;

}

int main()

{

 overload obj1(33,39);

 overload obj2(2,4);

 overload result;

 result = obj1 γ obj2;

 result.show_data();

 return 0;

}

Q2:-

```
⇒ #include <iostream>
#include <fstream>
using namespace std;
class student
{
    private:
        int Reg-no;
        float fees;
        char name[50], sec[30];
    public:
        void get-data()
        {
            cout << "Enter the name of student"
            gets(name);
            cout << "Enter your section"
            gets(sec);
            cout << "Enter your Reg-no"
            cin >> Reg-no;
            cout << "Enter your fees"
            cin >> fees;
        }
        float get-fees() { return fees; }
```

```
void input ()
```

```
{
```

```
fstream A;
```

```
A.open ("Student.txt", ios::app);
```

```
A << name << Reg.no << sec << fees;
```

```
A.close ();
```

```
}
```

```
void show_data ()
```

```
{
```

```
cout << "Name: -" << name << endl;
```

```
cout << "Section: -" << sec << endl;
```

```
cout << "Fees: -" << fees << endl;
```

```
cout << "Registration number: -" << Reg-No << endl;
```

```
}
```

```
};
```

```
int main ()
```

```
{
```

```
Student obj[10];
```

```
fstream A;
```

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

```
{
```

```
obj[i].get_data ();
```

```
obj[i].input ();
```

```
}
```

```
cout << "Students whose fees is equivalent to 10000 -";
```

```
int count = 0
```

```
for (int a=0; a<10; a++)
```

```
{
```

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```
float fees = obj[a].get_fees();
```

```
if (fees == 10000)
```

```
{
```

```
    [a].show_data();
```

```
    count++;
```

```
}
```

```
}
```

```
cout << "Total number of students whose fees is equivalent  
to 10000 is ." << count;
```

```
}
```

Q3

```

=> #include <iostream>
using namespace std;
class Question3
{
protected:
    int x;
public:
    virtual int task()=0;
};
class sub1 : public Question3
{
public:
    void get_data()
    {
        cout << "Enter the value of x:- ";
        cin >> x;
    }
    virtual int task()
    {
        int fact=1;
        if (x<0)
        {
            cout << "factorial is not possible as the value of x is less than 0";
        }
        else
        {
            for(int i=0; i<x; i++)
            {
                fact = fact * i;
            }
        }
        cout << "The factorial of the value." << x << " is " << fact;
    }
};

```

```
int main ( )
```

```
{
```

```
    Question 3 *ptr;
```

```
    sub1 02;
```

```
    ptr = &02;
```

```
    02, get-data();
```

```
    ptr → task0;
```

```
}
```


Q4

```
⇒ #include <iostream>
using namespace std;
class Question4
{
private:
    int upper-limit, lower-limit;
public:
    Question4(int upper-limit, int lower-limit)
    {
        int count = 0, i, flag;
        flag = 0;
        for (int n = lower-limit; n <= upper-limit; n++)
        {
            flag = 0;
            for (i = 2; i <= n/2; i++)
            {
                if (n % i == 0)
                {
                    flag = 1;
                    break;
                }
            }
            if (flag == 0 && n != 1)
            {
                count++;
            }
        }
    };
    int main()
    {
        Question4(10, 1);
        return 0;
    }
}
```