1. Take 2 integers input and print the greatest of them

```
[] 🔅
                                                                            Run
                                                                                      Output
main.cpp
2 using namespace std;
                                                                                    enter first number : 3453
                                                                                    enter second number : 56654
4 int main() {
                                                                                    56654is greatest.
       int a,b;
                                                                                    === Code Execution Successful ===
       cin>>a;
      cin>>b;
     if(b>a){
           cout<<a<<"is greatest.";</pre>
16 }
```

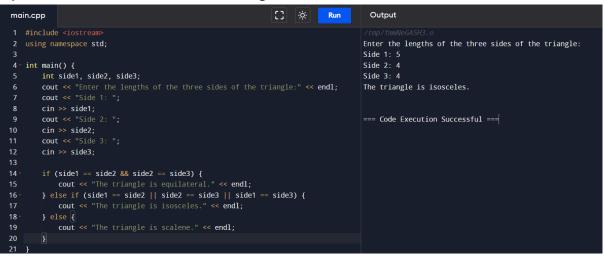
2. Given the radius of the circle, predict whether numerically the area of this circle is larger than the circumference or not.

3. Any year is input through the keyboard. Write a program to determine whether the year is a leap year or not. (Considering leap year occurs after every 4 years).

4. Given the length and breadth of a rectangle, write a program to find whether numerically the area of the rectangle is greater than its perimeter.

```
Run
main.cpp
                                                                     [] 🔅
                                                                                              Output
                                                                                            enter length :5
   using namespace std;
                                                                                            enter breadth :7
    int main() {
                                                                                            Area is greater than perimeter.
        float 1,b;
                                                                                             === Code Execution Successful ===
        cout<<"enter breadth :";</pre>
8
        cin>>b;
        float a = 1*b;
float p = 2*(1+b);
10
        if(a>p){
16
        else{
            cout<<"Perimeter is greater than area.";</pre>
18
```

5. Write a program to input sides of a triangle and check whether a triangle is equilateral, scalene or isosceles triangle.



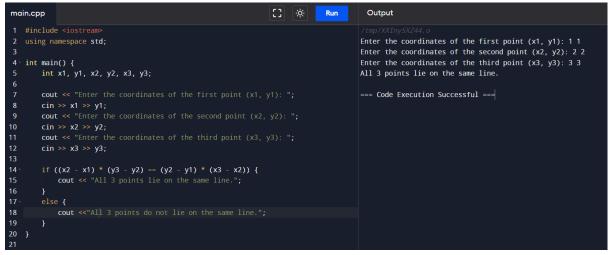
6.If the marks of A, B and C are input through the keyboard, write a program to determine the student scoring the least marks.

```
[] 🔅
                                                                                Run
main.cpp
                                                                                           Output
2 using namespace std;
                                                                                         Enter the marks of student A: 23
                                                                                         Enter the marks of student B: 34
                                                                                         Enter the marks of student C: 71
4 int main() {
       int marksA, marksB, marksC;
                                                                                         Student A has the least marks with 23 marks.
       cout << "Enter the marks of student A: ";</pre>
       cin >> marksA:
8
       cout << "Enter the marks of student B: ":</pre>
                                                                                         === Code Execution Successful ===
       cin >> marksB;
10
       cin >> marksC:
       if (marksA <= marksB && marksA <= marksC) {</pre>
            cout << "Student A has the least marks with " << marksA << " marks." <<</pre>
               endl;
       } else if (marksB <= marksA && marksB <= marksC) {</pre>
            cout << "Student B has the least marks with " << marksB << " marks." <</pre>
            cout << "Student C has the least marks with " << marksC << " marks." <</pre>
```

7. Given a point (x, y), write a program to find out if it lies on the x-axis, y-axis or at the origin, viz. (0, 0).

```
[] 🔅
main.cpp
                                                                               Run
                                                                                          Output
                                                                                        Enter the x-coordinate of the point: 2
2 using namespace std:
                                                                                        Enter the y-coordinate of the point: 0
4 int main() {
                                                                                        The point (2, 0) lies on the x-axis.
       cout << "Enter the x-coordinate of the point: ";</pre>
                                                                                        === Code Execution Successful ===
       if (x == 0 \&\& y == 0) {
               endl;
       } else if (x == 0) {
               end1;
       } else if (y == 0) { cout << "The point (" << x << ", " << y << ") lies on the x-axis." <<
               end1;
               y-axis, or at the origin." << endl;
```

8. Given three points (x1, y1), (x2, y2) and (x3, y3), write a program to check if all the three points fall on one straight line.



9. Write a C++ program to input any character and check whether it is the alphabet, digit or special character.

```
1 #include <iostream>
2 using namespace std;
3
4 int main() {
5    char ch;
6    cout << "Enter any character: ";
7    cin >> ch;
8
9    if ((ch >= 'A' && ch <= 'Z') || (ch >= 'a' && ch <= 'z')) {
10        cout << "alphabet." << endl;
11    }
12    else if (ch >= '0' && ch <= '9') {
13        cout << "digit." << endl;
14    }
15    else {
16        cout << "special character." << endl;
17    }
18 }</pre>
```

10.Predict the output of the below code: