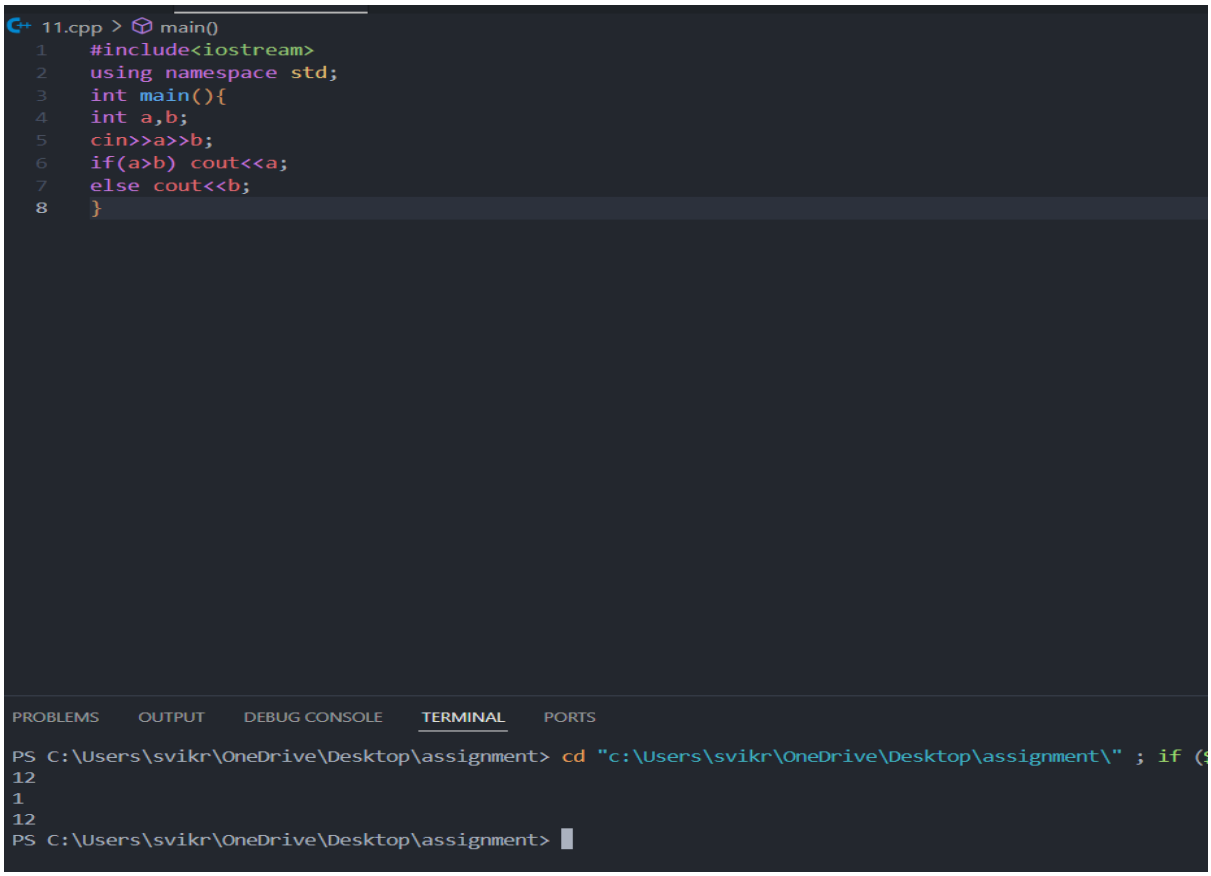
C++ Assignments | Fundamentals of Programming -1 | Week2

Ques 1)



11.cpp > main()

```cpp
#include<iostream>
using namespace std;
int main(){
int a,b;
cin>>a>>b;
if(a>b) cout<<a;
else cout<<b;
}
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\svikr\OneDrive\Desktop\assignment> cd "c:\Users\svikr\OneDrive\Desktop\assignment\" ; if ($?) { g++ 11.cpp -o 11 } ; if ($?) { .\11 }
5
7
7
PS C:\Users\svikr\OneDrive\Desktop\assignment>
```

Code
Code
Code

Ques2)

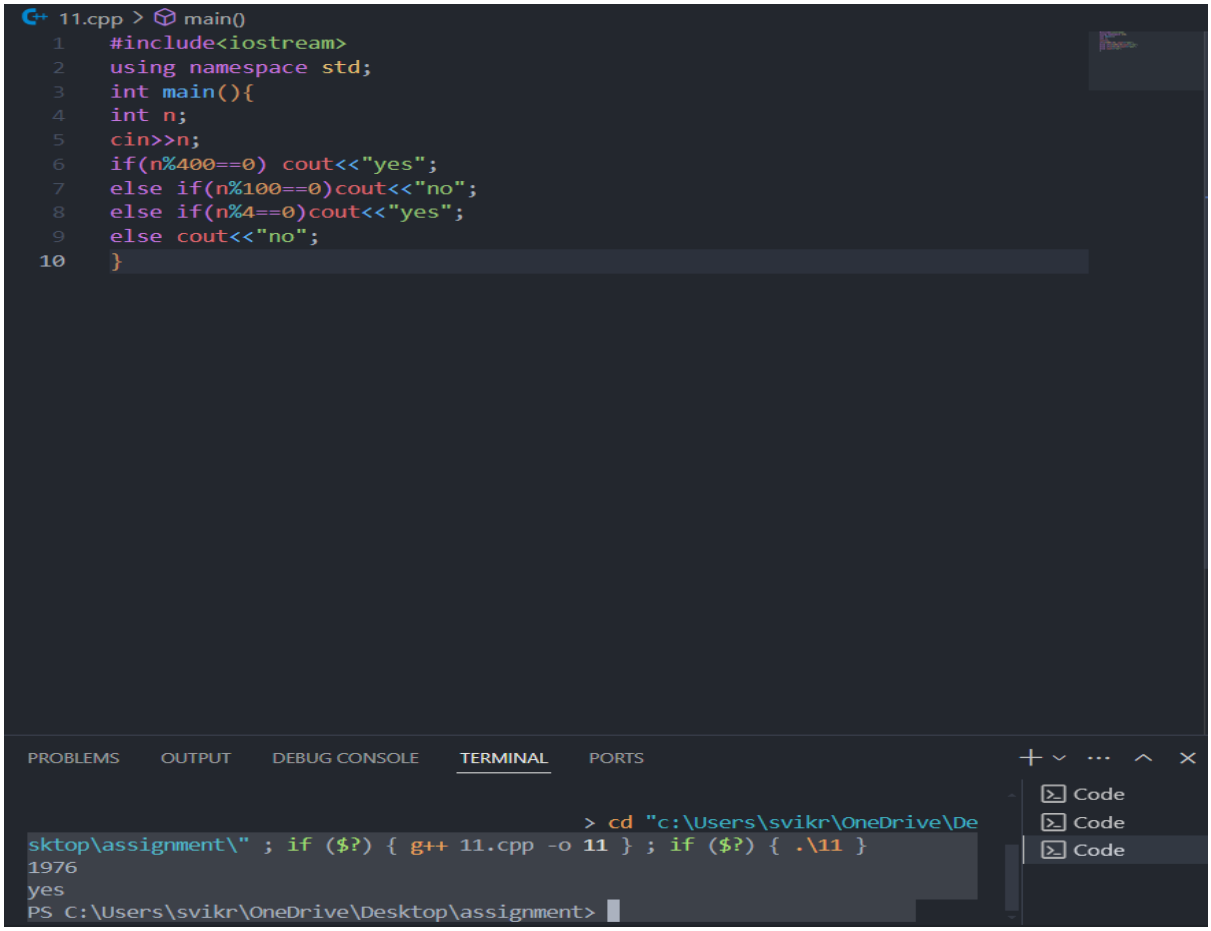
11.cpp > main()

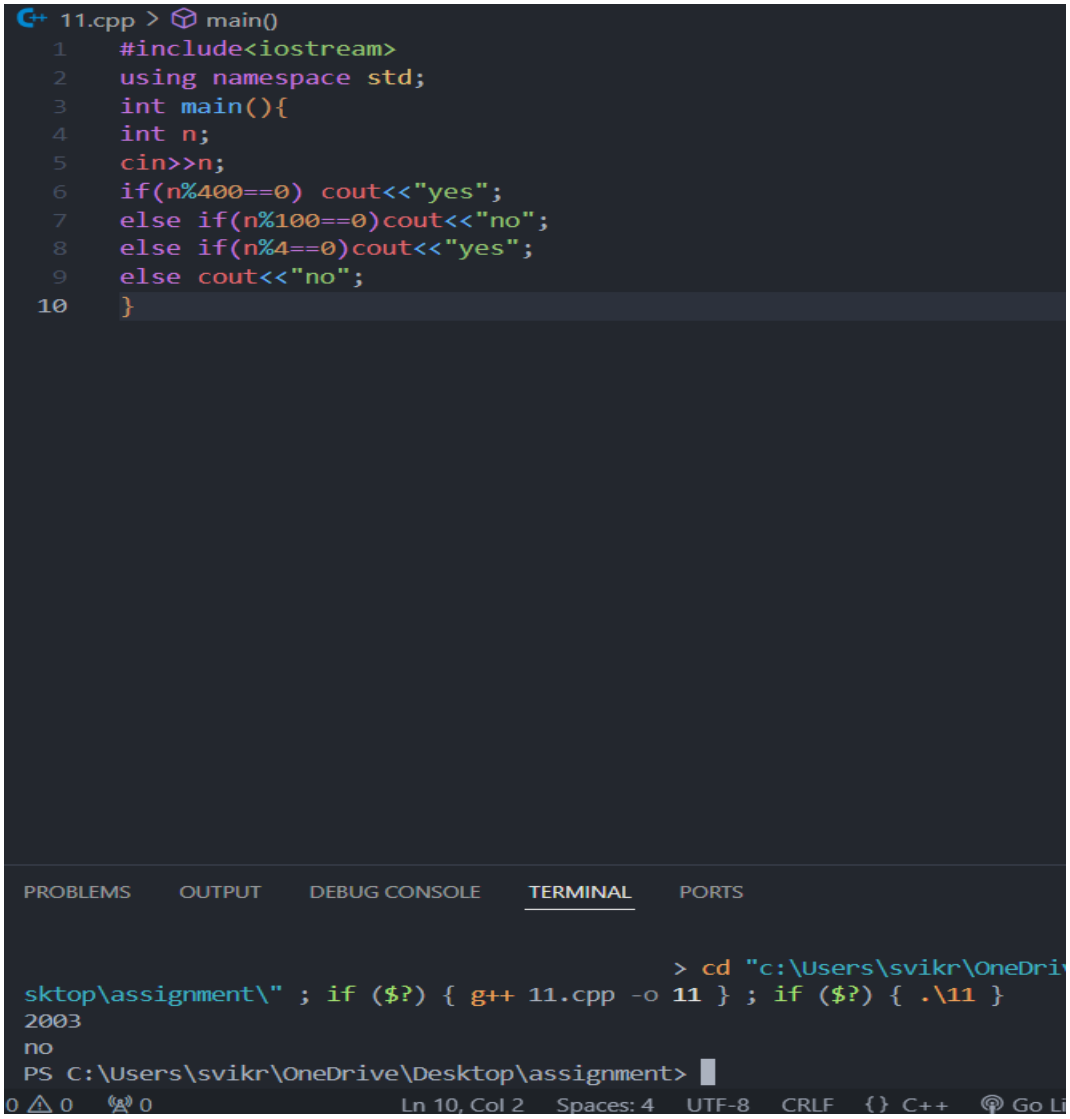
```cpp
#include<iostream>
using namespace std;
int main(){
int radius;
cin>>radius;
float area=3.14*radius*radius;
float circumference =2*3.14*radius;
if(area>circumference) cout<<area<< endl<<"area>circumference";
else cout<<circumference<<endl<<"area<circumference";
}
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

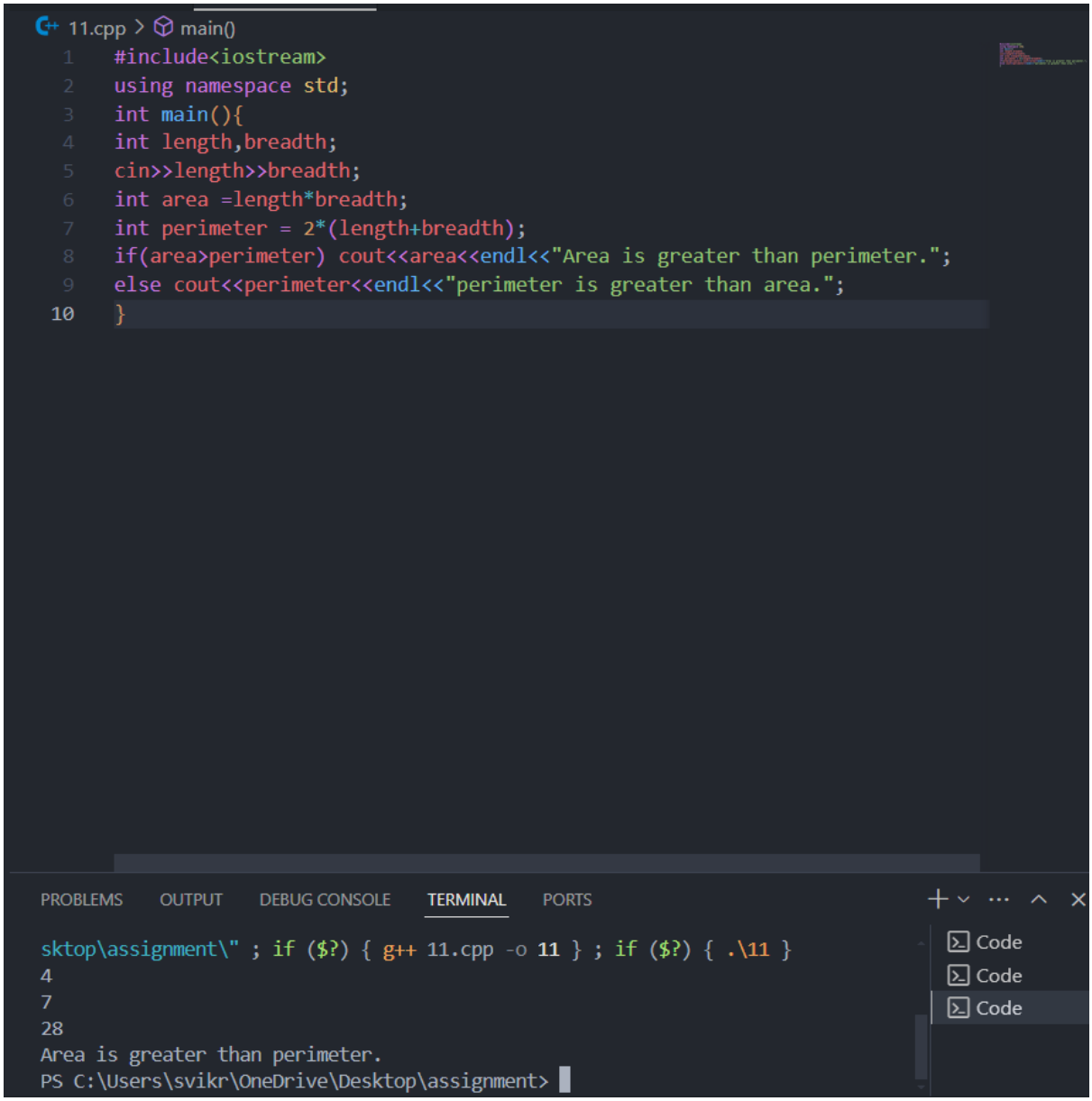
```
> cd "c:\Users\svikr\OneDrive\Desktop\assignment\" ; if ($?) { g++ 11.cpp -o 11 } ; if ($?) { .\11 }
4
50.24
area>circumference
PS C:\Users\svikr\OneDrive\Desktop\assignment>
```

Ques 3)

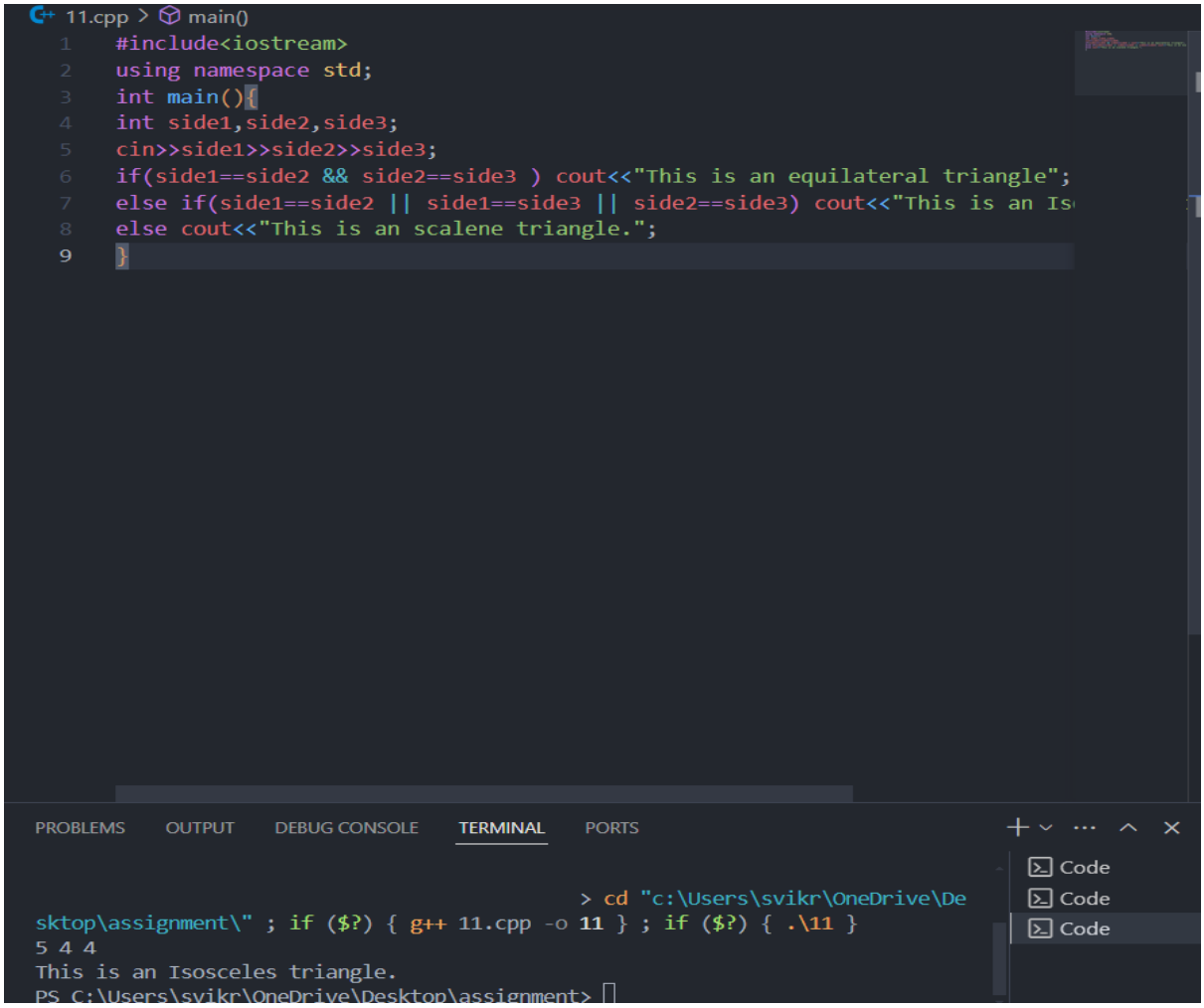

11.cpp > main()
#include<iostream>
using namespace std;
int main(){
int n;
cin>>n;
if(n%400==0) cout<<"yes";
else if(n%100==0)cout<<"no";
else if(n%4==0)cout<<"yes";
else cout<<"no";
}
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
> cd "c:\Users\svikr\OneDrive\Desktop\assignment\" ; if ($?) { g++ 11.cpp -o 11 } ; if ($?) { .\11 }
1976
yes
PS C:\Users\svikr\OneDrive\Desktop\assignment>
Code
Code
Code


11.cpp > main()
#include<iostream>
using namespace std;
int main(){
int n;
cin>>n;
if(n%400==0) cout<<"yes";
else if(n%100==0)cout<<"no";
else if(n%4==0)cout<<"yes";
else cout<<"no";
}
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
> cd "c:\Users\svikr\OneDri
sktop\assignment\" ; if ($?) { g++ 11.cpp -o 11 } ; if ($?) { .\11 }
2003
no
PS C:\Users\svikr\OneDrive\Desktop\assignment>
0 0 0
Ln 10, Col 2
Spaces: 4
UTF-8
CRLF
{} C++
Go Li

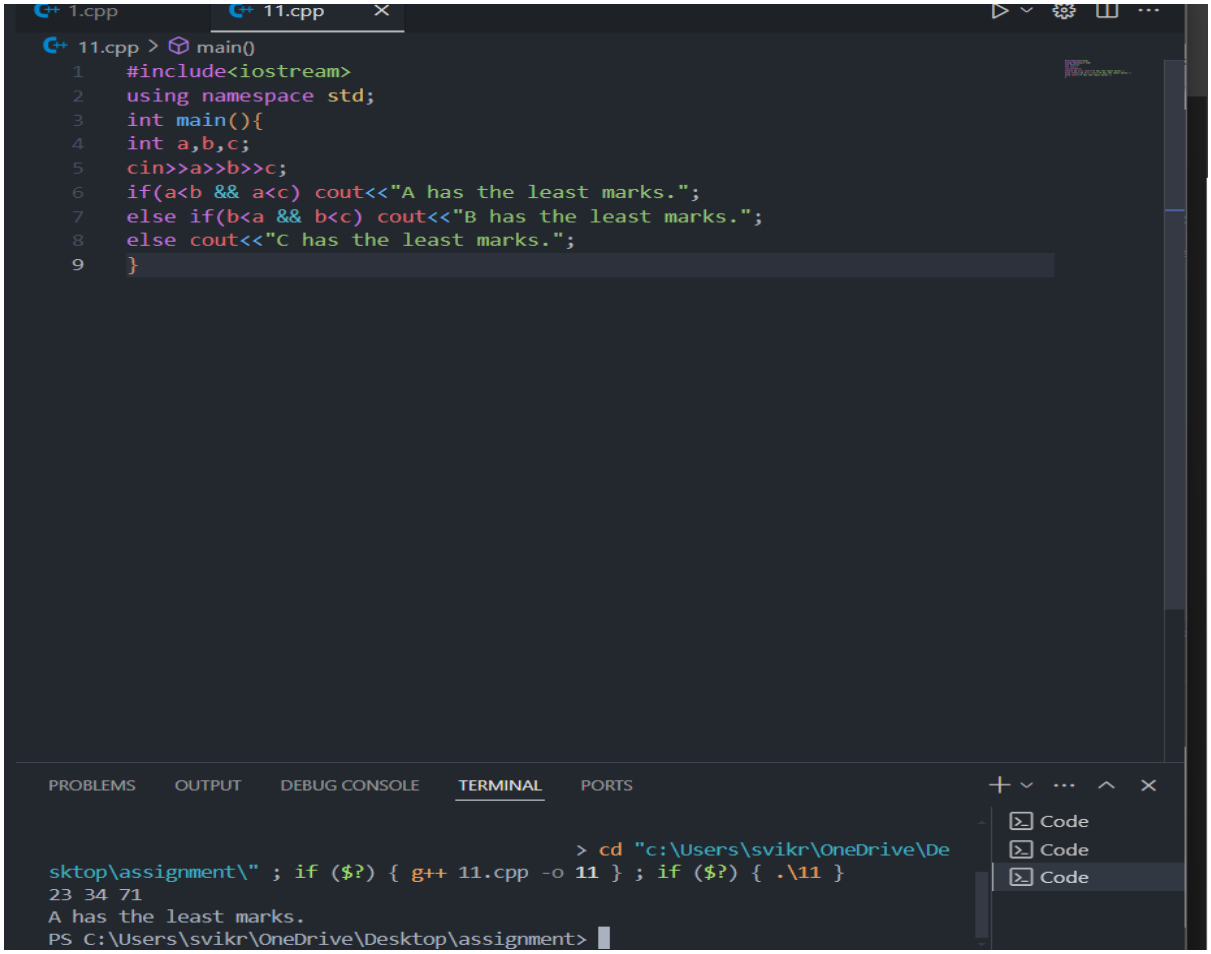
Ques 4)


11.cpp > main()
#include<iostream>
using namespace std;
int main(){
int length,breadth;
cin>>length>>breadth;
int area =length*breadth;
int perimeter = 2*(length+breadth);
if(area>perimeter) cout<<area<<endl<<"Area is greater than perimeter.";
else cout<<perimeter<<endl<<"perimeter is greater than area.";
}
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
sktop\assignment\" ; if ($?) { g++ 11.cpp -o 11 } ; if ($?) { .\11 }
4
7
28
Area is greater than perimeter.
PS C:\Users\svikr\OneDrive\Desktop\assignment>
Code
Code
Code

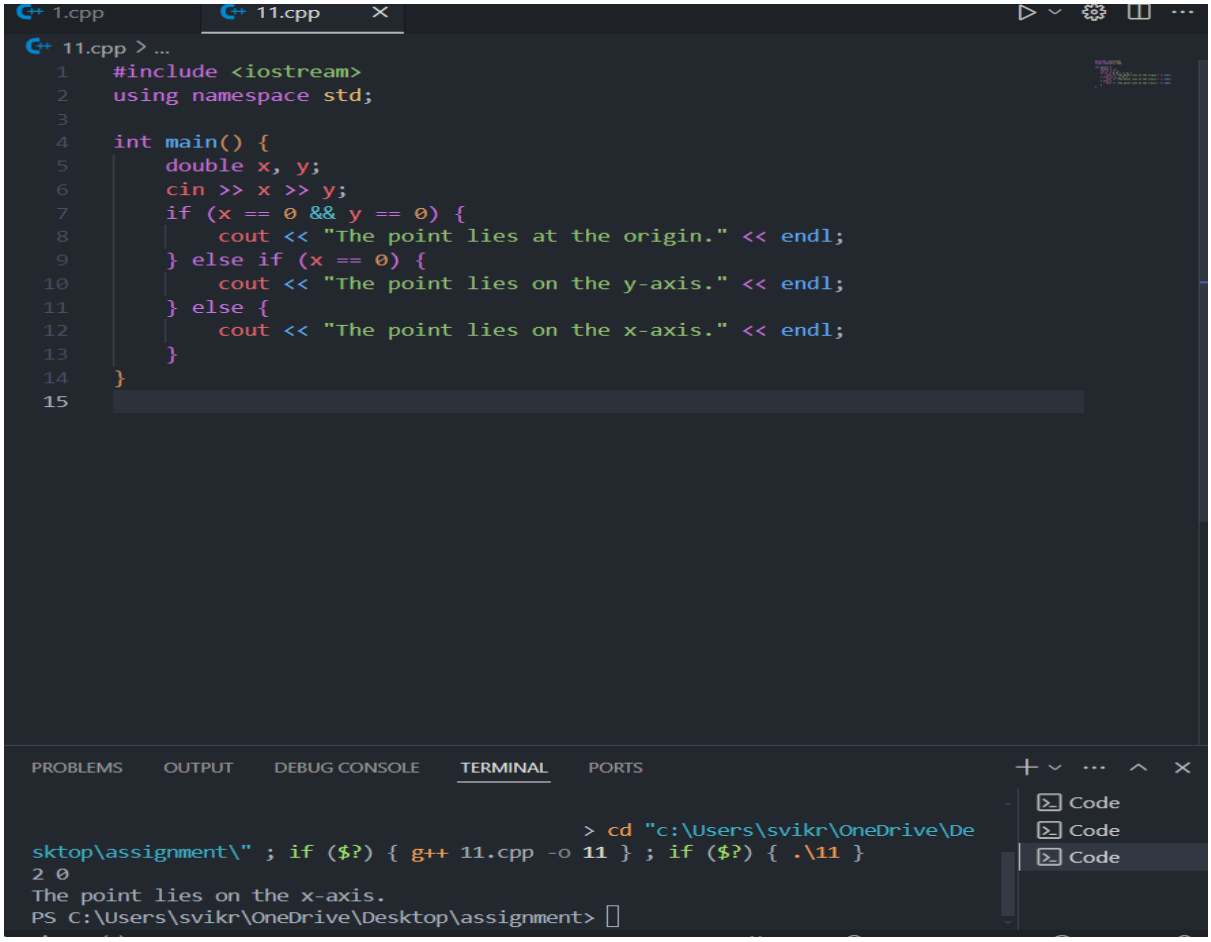
Ques 5)


11.cpp > main()
#include<iostream>
using namespace std;
int main(){
int side1,side2,side3;
cin>>side1>>side2>>side3;
if(side1==side2 && side2==side3) cout<<"This is an equilateral triangle";
else if(side1==side2 || side1==side3 || side2==side3) cout<<"This is an Is
else cout<<"This is an scalene triangle.";
}
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
> cd "c:\Users\svikr\OneDrive\De
sktop\assignment\" ; if ($?) { g++ 11.cpp -o 11 } ; if ($?) { .\11 }
5 4 4
This is an Isosceles triangle.
PS C:\Users\svikr\OneDrive\Desktop\assignment>
Code
Code
Code

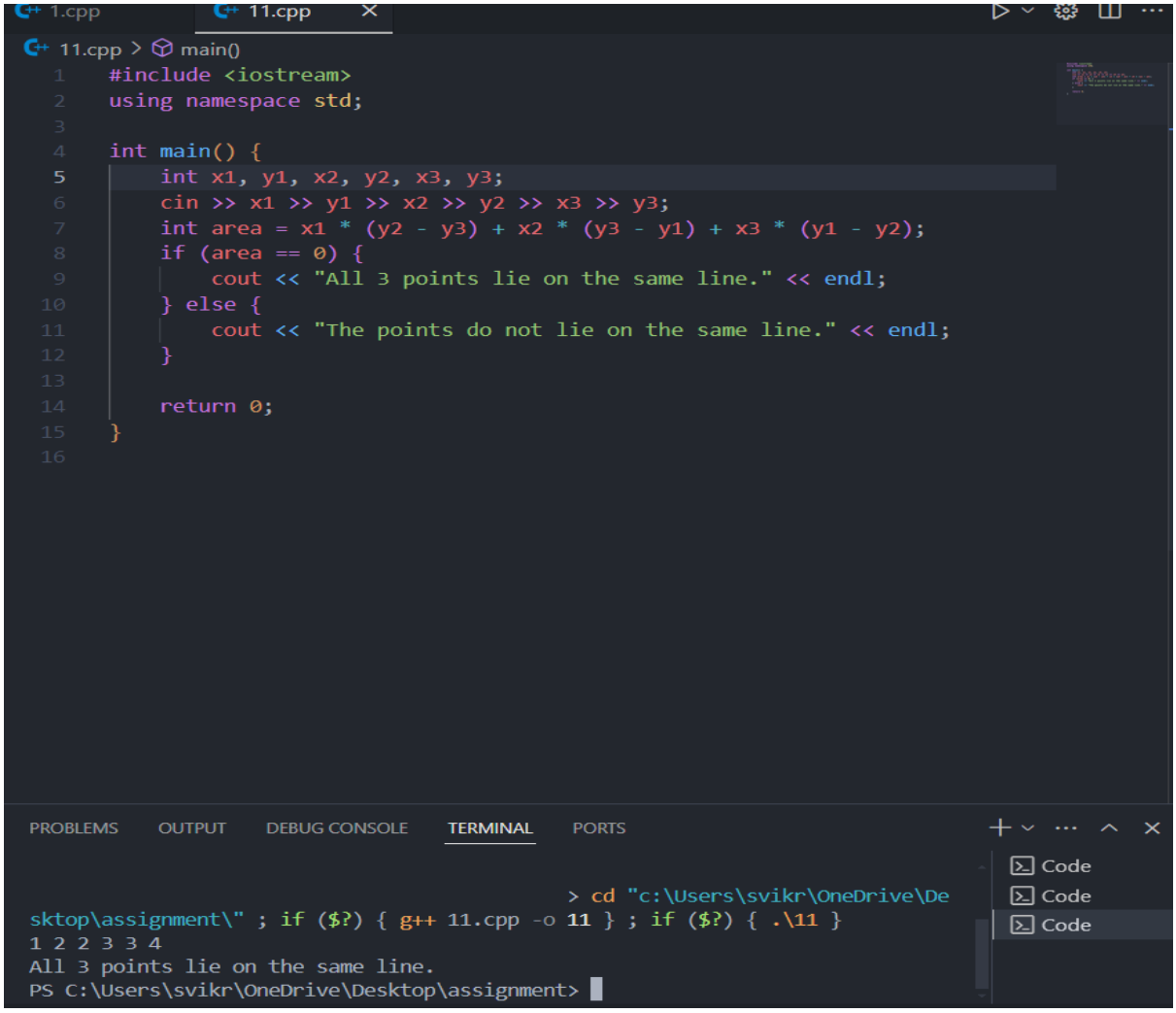
Ques 6)


1.cpp
11.cpp
11.cpp > main()
#include<iostream>
using namespace std;
int main(){
int a,b,c;
cin>>a>>b>>c;
if(a<b && a<c) cout<<"A has the least marks.";
else if(b<a && b<c) cout<<"B has the least marks.";
else cout<<"C has the least marks.";
}
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
> cd "c:\Users\svikr\OneDrive\Desktop\assignment\" ; if ($?) { g++ 11.cpp -o 11 } ; if ($?) { .\11 }
23 34 71
A has the least marks.
PS C:\Users\svikr\OneDrive\Desktop\assignment>
Code
Code
Code

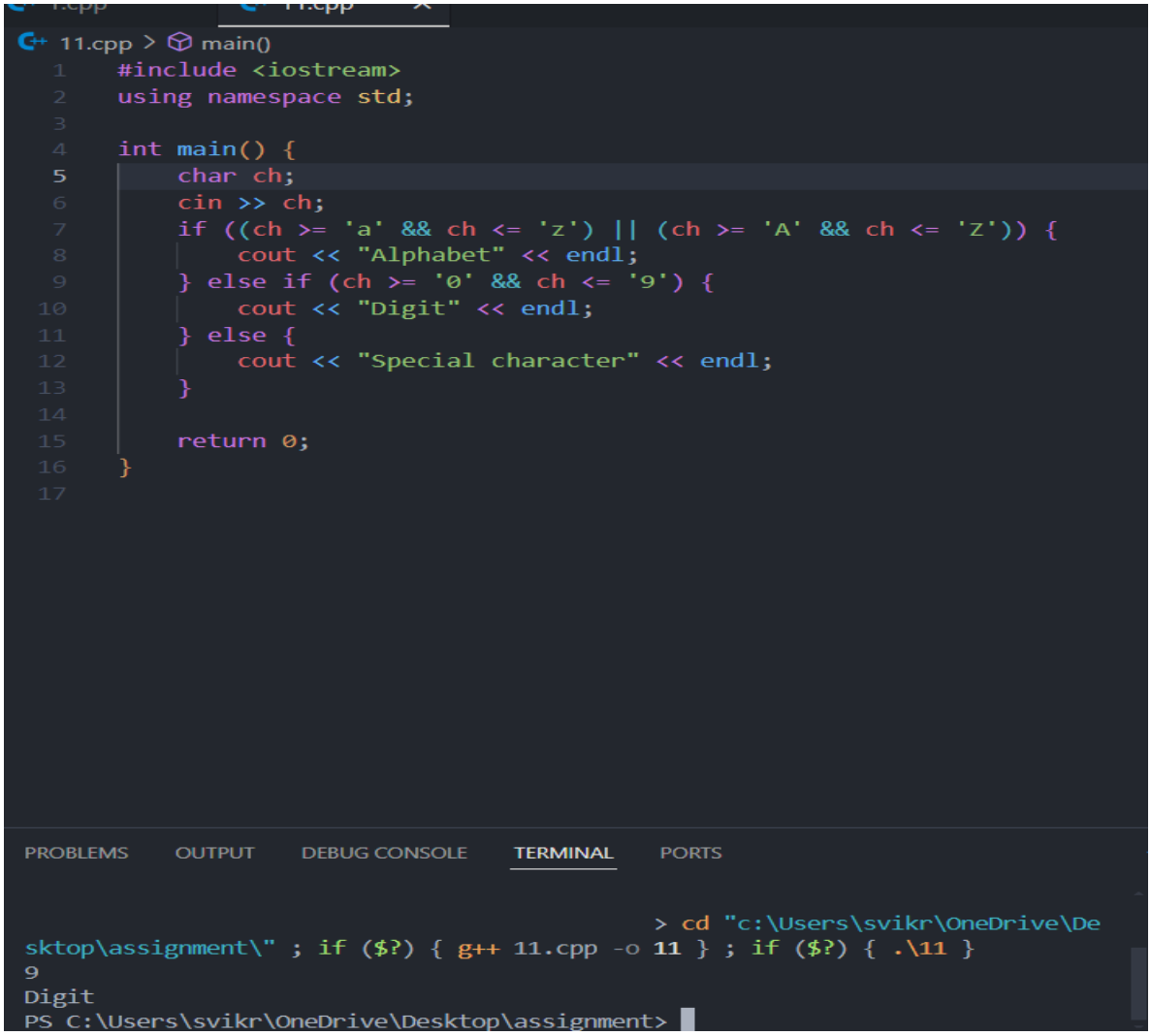
Ques7)


1.cpp
11.cpp
11.cpp > ...
#include <iostream>
using namespace std;
int main() {
double x, y;
cin >> x >> y;
if (x == 0 && y == 0) {
cout << "The point lies at the origin." << endl;
} else if (x == 0) {
cout << "The point lies on the y-axis." << endl;
} else {
cout << "The point lies on the x-axis." << endl;
}
}
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
> cd "c:\Users\svikr\OneDrive\Desktop\assignment\" ; if ($?) { g++ 11.cpp -o 11 } ; if ($?) { .\11 }
2 0
The point lies on the x-axis.
PS C:\Users\svikr\OneDrive\Desktop\assignment>
Code
Code
Code

Ques 8)


1.cpp
11.cpp
11.cpp > main()
#include <iostream>
using namespace std;
int main() {
int x1, y1, x2, y2, x3, y3;
cin >> x1 >> y1 >> x2 >> y2 >> x3 >> y3;
int area = x1 * (y2 - y3) + x2 * (y3 - y1) + x3 * (y1 - y2);
if (area == 0) {
cout << "All 3 points lie on the same line." << endl;
} else {
cout << "The points do not lie on the same line." << endl;
}
return 0;
}
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
Code
Code
Code
> cd "c:\Users\svikr\OneDrive\Desktop\assignment\" ; if ($?) { g++ 11.cpp -o 11 } ; if ($?) { .\11 }
1 2 2 3 3 4
All 3 points lie on the same line.
PS C:\Users\svikr\OneDrive\Desktop\assignment>

Ques 9)



```
11.cpp > main()
#include <iostream>
using namespace std;

int main() {
    char ch;
    cin >> ch;
    if ((ch >= 'a' && ch <= 'z') || (ch >= 'A' && ch <= 'Z')) {
        cout << "Alphabet" << endl;
    } else if (ch >= '0' && ch <= '9') {
        cout << "Digit" << endl;
    } else {
        cout << "Special character" << endl;
    }

    return 0;
}
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

                                        > cd "c:\Users\svikr\OneDrive\De
sktop\assignment\" ; if ($?) { g++ 11.cpp -o 11 } ; if ($?) { .\11 }
9
Digit
PS C:\Users\svikr\OneDrive\Desktop\assignment>
```

Ques 10) Predict the output of the below code:

Ans) value of b and c are respectively 300 and 200.