

Q.6) Program that accepts the length of three sides of a triangle as input and determine whether or not the triangle is a right angled triangle.

```
def Right_triangle(a, b, c):
```

```
Sides = sorted([a, b, c])
```

```
x, y, hypotenuse = Sides
```

```
if x**2 + y**2 == hypotenuse**2:
```

```
    print("The given triangle is a right-angled triangle.")
```

```
else:
```

```
    print("The given triangle is not a right-angled triangle.")
```

```
a = float(input("Enter the first side: "))
```

```
b = float(input("Enter the second side: "))
```

```
c = float(input("Enter the third side: "))
```

```
if a + b > c and a + c > b and b + c > a:
```

```
    Right_triangle(a, b, c)
```

```
else:
```

```
    print("The given sides do not form a valid triangle.")
```