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Task :

1. **Follow the steps:**

•) Create a class, Triangle. Its __init__() method should take self, angle1, angle2, and angle3 as arguments. Make sure to set these appropriately in the body of the __init__()method.

•) Create a variable named number_of_sides and set it equal to 3.

•) Create a method named check_angles. The sum of a triangle's three angles is It should return True if the sum of self.angle1, self.angle2, and self.angle3 is equal 180, and False otherwise.

•) Create a variable named my_triangle and set it equal to a new instance of your Triangle class. Pass it three angles that sum to 180 (e.g. 90, 30, 60).

•) Print out my_triangle.number_of_sides and print out my_triangle.check_angles().?

Answer :

In [16]:
```
class Triangle:
    def __init__(self, angle1, angle2,angle3):
        self.angle1 = angle1
        self.angle2 = angle2
        self.angle3 = angle3


    def check_angles(self):
        sum = self.angle1 + self.angle2 + self.angle3;
        if sum == 180:
            return "true"
        return "false"


number_of_sides = 3

my_triangle = Triangle(90,30,60)

print('my_triangle.number_of_sides:\n',number_of_sides,"my_triangle.check_angles:\n",my_triangle.check_angles())
```

```
my_triangle.number_of_sides:
 3 my_triangle.check_angles:
 true
```

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2. **Import the math module in whatever way you prefer. Call its sqrt function on the number 13689 and print that value to the console?**

Answer :

```
In [23]: from math import sqrt
         print('Square root of 13689 is: ',sqrt(13689))

         Square root of 13689 is:  117.0
```

3. . **Follow the steps:**

•) First, def a function called cube that takes an argument called number.

•) Make that function return the cube of that number (i.e. that number multiplied by itself and multiplied by itself once again).

•) Define a second function called by_three that takes an argument called number. if that number is divisible by 3,by_threeshould call cube(number) and return its result. Otherwise, by_three should return False. -Check if it works.?

Answer:

```
In [34]: def cube(number):
             return number * number * number

         def by_three(number):
             if number % 3 == 0:
                 return cube(number)
             return 'false'
         num = 7
         obj = by_three(num)

         if obj != 'false':
             print('the cube of the ',num,' is : ',obj)
         else:
             print('number is not divisible by 3')


         number is not divisible by 3
```