1. The radius of a circle is 5.5. Write a script to compute the area of a circle.

In [4]:
```
r = 5.5
PI = 3.14
area = PI * r**2
print("The area of a circle with a radius of 5.5 is ", area)
```

```
The area of a circle with a radius of 5.5 is  94.985
```

2. Write a program where Python prints your name, then print them in reverse order with a comma between them. Put this in the same cell.

For example:

Sophia Barrett
Barrett, Sophia

In [27]:
```
firstname = input("input your first name : ")
lastname = input("input your last name : ")
print(firstname + " " + lastname)
print(lastname + ", " + firstname)
```

```
input your first name : Emma
input your last name : Block
Emma Block
Block, Emma
```

3. Write a program to test if a number is divisible by 5.

In [18]:
```
number = int(input(" enter any postiive integer : "))
if(number % 5 == 0) :
    print("given number {0} is divisible by 5")
else:
    print("given Number {0} is not divisible by 5")
```

```
 enter any postiive integer : 55
given number {0} is divisible by 5
```

4. What is the output of the following program?

```
a = 1
b = a 2
c = 2 b + 1
print(a)
print(b)
print(c)
```

Answer:

1 2 5

5. What is the output of the following program?

```
a = 2
b = a * 2
c = b ** a
a = c % 2
print(a)
print(b)
print(c)
```

Answer:

0 4 16

6. What is the output of the following program?

```
a = 5
b = a // 2
c = a / 2
a = a % 2
print(a)
print(b)
print(c)
```

answer:

1 2 2.5

7. Type each of the following commands. Note each response.
print("Hello, world!")
print("Hello", "world!")
print(3)
print(3.0)
print(2 + 3)
print(2.0 + 3.0)
print(2 * 3)
print(2 ** 3) print(7 / 3)
print(7 // 3)

In [30]:
```
print("Hello, world!")
```
```
Hello, world!
```

In [31]:
```
print("Hello", "world!")
```
```
Hello world!
```

In [32]:
```
print(3)
```
```
3
```

In [33]:
```
print(3.0)
```
```
3.0
```

In [34]:
```
print(2 + 3)
```
```
5
```

In [35]:
```
print(2.0 + 3.0)
```
```
5.0
```

In [36]:
```
print(2 * 3)
```
```
6
```

In [37]:
```
print(2 ** 3)
```
```
8
```

In [38]:
```
print(7 / 3)
```
```
2.3333333333333335
```

In [39]:
```
print(7 // 3)
```
```
2
```

8.

Create a program with a name and age. Then have it print out a message addressed to name that tells them the year that they will turn 100 years old.

In [47]:
```
name = input("What is your name: ")
age = int(input("How old are you?: "))
year = str((2020 - age) + 100)
print(name + " will turn 100 in the year " + year)
```

```
What is your name: Emma
How old are you?: 27
Emma will turn 100 in the year 2093
```

9. Create a sequence of numbers from 3 to 19, but increment by 2.

In [48]:
```
x = range(3, 20, 2)
for n in x:
    print(n)
```

```
3
5
7
9
11
13
15
17
19
```

10. Try to solve this problem on your own first, then check your results with python.

a = 21 b = 10 c = 0

c = a + b print "Line 1 - Value of c is ", c

c += a print "Line 2 - Value of c is ", c

c *= a print "Line 3 - Value of c is ", c

c /= a print "Line 4 - Value of c is ", c

c = 2 c %= a print "Line 5 - Value of c is ", c

c **= a print "Line 6 - Value of c is ", c

c //= a print "Line 7 - Value of c is ", c

In [54]:
```
a = 21
b = 10
c = 0

c = a + b
print ("Line 1 - Value of c is ", c)

c += a
print ("Line 2 - Value of c is ", c)

c *= a
print ("Line 3 - Value of c is ", c)

c /= a
print ("Line 4 - Value of c is ", c)

c  = 2
c %= a
print ("Line 5 - Value of c is ", c)

c **= a
print ("Line 6 - Value of c is ", c)

c //= a
print ("Line 7 - Value of c is ", c)
```

```
Line 1 - Value of c is  31
Line 2 - Value of c is  52
Line 3 - Value of c is  1092
Line 4 - Value of c is  52.0
Line 5 - Value of c is  2
Line 6 - Value of c is  2097152
Line 7 - Value of c is  99864
```

In [ ]: