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Question 1

In [1]:
```
print("The sky is clear today.")
```

```
The sky is clear today.
```

Question 2

In [2]:
```
note = "The sky is clear today"
print(note)
```

```
The sky is clear today
```

Question 3

In [3]:
```
note = "The sky isn't as clear today"
print(note)
```

```
The sky isn't as clear today
```

Question 4

In [4]:
```
name = "kya"
print("Hello "+name+", what is your plan for the day?")
```

```
Hello kya, what is your plan for the day?
```

Question 5

In [5]:
```
print(name.title())
```

```
Kya
```

In [6]:
```
print(name.upper())
```

```
KYA
```

In [7]:
```
print(name.lower())
```

```
kya
```

Question 6

In [8]:
```
l_name = "rox"
full_name = name+" "+l_name
print(full_name.title()+" is tall")
```

```
Kya Rox is tall
```

Question 7

In [9]:
```
print(18+18)
print(48-12)
print(12*3)
print(180/5)
print(6**2)
```

```
36
36
36
36.0
36
```

Question 8

In [10]:
```
import math
print(3*math.log(math.e))
print(6*math.cos(math.pi))
print(math.e**(math.sin((3*math.pi)/4)))
print(math.sqrt(math.e**2))
print(math.log10(1000))
```

```
3.0
-6.0
2.0281149816474726
2.718281828459045
3.0
```

Question 9

In [14]:
```
from math import pi
diameter = 16
radius = diameter/2
area = pi*(radius**2)
circumference = 2*pi*radius
print("The circumference is "+ str(circumference) +"and the area is "+str(area))
```

```
The circumference is 50.26548245743669and the area is 201.06192982974676
```

Question 10, 11, 12

In [12]:
```
from math import sin, cos, asin, degrees, radians, sqrt

b = (8/sin(radians(67)))*sin(radians(55))
C = degrees(asin(((sin(radians(34))*8)/14)))
a = sqrt((8**2 + 5**2)-(cos(radians(85))*(2*8*5)))

print("b length = "+str(b)+"cm")
print("Angle C= "+str(C))
print("A length= "+str(a)+"cm")
```

```
b length = 7.119154591888872cm
Angle C= 18.635035883825097
A length= 9.056905684624708cm
```