CSE 101 - Introduction to Programming
Tutorial 3 - Solutions

Q1. Write a Python program to get the difference between a given number and 17, if the number is greater than 17 return double the absolute difference.

```
n = int(input())
if (n <= 17):
    print(17 - n)
else:
    print(2*(n - 17))
```

Q2. Write a Python program to find the minimum and maximum value for a list of 3 integers, given in a single line separated with spaces.

```
a,b,c = map(int, input().split())
maxnum = a
if(b > maxnum):
    maxnum = b
if(c > maxnum):
    maxnum = c

minnum = a
if(b < minnum):
    minnum = b
if(c < minnum):
    minnum = c

print("Maximum is : ", maxnum)
print("Minimum is : ", minnum)
```

Q3.Write a Python program to check if given three sides of a triangle as user input, does it form a right-angled triangle or not.

```
s1, s2, s3 = map(int, input().split())
x = max(s1, s2, s3)
y = min(s1, s2, s3)
z = s1 + s2 + s3 - x - y

if(x**2 == y**2 + z**2):
    print("Yes")
else:
    print("No")
```

Q4. Write a Python program to find lexicographically largest of the three strings that are taken as user input.

```
a, b, c = input().split()
largest = a
if(b > largest):
    largest = b
if(c > largest):
    largest = c
print("Lexographically Largest : ", largest)
```

Q5. Write a Python program which reads two integer numbers on the same line, separated by spaces, and prints, whether they have the same sign(i.e either both are positive or both are negative), different sign or at least one of them, is zero(we have considered zero to be neither negative nor positive).

```
a,b = map(int, input().split())
if(a == 0 or b == 0):
    print("Atleast one is zero.")
else:
    print((a*b) / abs(a*b))
```