**Python - Worksheet 1**

**Answers**

Q1) - c - %

Q2) - b- 0

Q3) - c -24

Q4) - a-2  
 Q5) - d- 6

Q6) - c - the finally block will be executed no matter if the try block raises an error or not.

Q7) - a - It is used to raise an exception.

Q8) - c- in Defining a generator

Q9) - a & c

Q10) - a & b

Q11)

**- using math library**

From math import factorial

Factorial()

**- by defining a function**

Def factorial(n):

x=1

For num in range(2, n+1):

Y = Y \* z

Return Y

Q12)

**- by defining a function**

def prime(n):

for num in range(2,n):

if n % num == 0:

print('composite')

print(int(n/num),'\*',num,'=',n)

break

else:

print('Prime')

Q13)

**-by defining a function**

def pali(n):

x = []

if type(n) == str:

for i in n:

x.append(i)

if x == x[::-1]:

print('given string is a Palidrome')

else:

print('given string is not a palidrome')

else:

print('please enter string values')

Q14)

1. **Sides**

**- by defining a function**

import numpy as np

def sides(x,y):

z = x\*\*2 + y\*\*2

z = np.sqrt(z)

print('the third side of the triangle is ---',z)

1. **Angle**

**-by defining a function**

def side(n):

if 180 - (90 + n) > 0:

print('the other side of the traingle is ---', (180 - (90 + n)))

else:

print('the sum of all the angle of a triangle cannot exceeds 180')

Q15)

import pandas as pd

def freq(n):

x =[]

if type(n) == str:

for i in n:

x.append(i)

y = pd.DataFrame(x)

print(y.value\_counts())

else:

print('Please enter string values')