Assignment 1

1.

x = input('Please enter a positive integer:')

if x != type(int()) and int(x) < 0:

print("This is not a positive integer, try again:")

else:

print("This is Positive integer")

2.

x = int(input("Enter a number: "))

if (x % 2) == 0:

print("{0} is Even".format(x))

else:

print("{0} is Odd".format(x))

3.

year = int(input("Enter a Year: "))

if (year % 4) == 0:

if (year % 100) == 0:

if (year % 400) == 0:

print("{0} is a leap year".format(year))

else:

print("{0} is not a leap year".format(year))

else:

print("{0} is a leap year".format(year))

else:

print("{0} is not a leap year".format(year))

4.

num1 = float(input("Enter first number: "))

num2 = float(input("Enter second number: "))

num3 = float(input("Enter third number: "))

if (num1 >= num2) and (num1 >= num3):

largest = num1

elif (num2 >= num1) and (num2 >= num3):

largest = num2

else:

largest = num3

print("The largest number is", largest)

5.

a = int(input("Enter number: "))

a\_string = str(a)

a\_length = len(a\_string)

c = int(a\_string[a\_length - 10: a\_length])

print("The last ten digit for the number: ", a, " is: ", c)

6.

num = int(input("Enter number: "))

factorial = 1

if num < 0:

print("Sorry, factorial does not exist for negative numbers")

elif num == 0:

print("The factorial of 0 is 1")

else:

for i in range(1,num + 1):

factorial = factorial\*i

print("The factorial of",num,"is",factorial)