Day 1:

3} Write a program that stores a number and keeps trying to get user input until the user enters the number correctly. As soon as the correct number is entered, it prints: Correct!

n=int(input())

while n>0:

m=int(input())

if m==n:

print ("correct")

break

4} Input your first name and last name as two separate variables, labeled as $firstname and $lastname respectively. Concatenate them together using the dot operator '.' into a new variable called $wholename. Then print out the $wholename.

firstname="Rohit"

lastname="Chavan"

wholename=''.join([firstname," ",lastname])

print(wholename)

6} Write a version of a palindrome recognizer that also accepts phrase palindromes such as "Go hang a salami I'm a lasagna hog.", "Was it a rat I saw?", "Step on no pets", "Sit on a potato pan, Otis", "Lisa Bonet ate no basil", "Satan, oscillate my metallic sonatas", "I roamed under it as a tired nude Maori", "Rise to vote sir", or the exclamation "Dammit, I'm mad!". Note that punctuation, capitalization, and spacing are usually ignored.

import re

s = "Was it a rat I saw?"

s = re.sub(r'[^\w\s]','',s)

s=s.replace(" ","")

s=s.lower()

s1=s[::-1]

if(s==s1):

print("Palindrome")

else:

print("Not a palindrome")

7} A pangram is a sentence that contains all the letters of the English alphabet at least once, for example: The quick brown fox jumps over the lazy dog. Your task here is to write a function to check a sentence to see if it is a pangram or not.

def pangram(s1):

s="abcdefghijklmnopqrstuvwxyz"

s2=''.join(set(s1))

s2=''.join(sorted(s2))

print(s2)

if s==s2:

print("Pangram")

else:

print("Not a Pangram")

s1="aabbccddeeffgghhiijjkkllmmnnooppqqrrssttuuvvwwxxyyzz"

pangram(s1)

9} Write a function char\_freq() that takes a string and builds a frequency listing of the characters contained in it. Represent the frequency listing as a Python dictionary. Try it with something likechar\_freq ("abbabcbdbabdbdbabababcbcbab").

def char\_freq(s):

s1=''.join(set(s))

s1=''.join(sorted(s1))

lst={}

for a in s1:

b=s.count(a)

lst[a]=b

print (lst)

s="aaaabcccd"

char\_freq(s)

13} WAP to read data from one file and writes in second file.

f1=open("abc.py",'r')

f2=open("abc.txt",'w')

for line in f1:

f2.write(line)

f1.close()

f2.close()

14}

import math

import numpy as np

my\_list=[10,20,30,40,50]

my\_matrix=[[5,10,20,30],[35,40,45,50],[55,60,65,70]]

print (math.ceil(1.2))

print (math.floor(1.2))

print (math.pow(10,2))

print (math.sin(1))

print (math.cos(1))

print (math.log(10))

print (math.exp(4))

print (math.sqrt(9))

print (min(10,20,1,2))