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PAPER: PYTHON

1.Create a program that asks the user to enter their name and their age. Print out a message that tells them the year that they will turn 100 years old.

```
name= str(input("Enter the Name:"))
age= int(input("Enter the Age:"))
age =100-age print
("hi....",name)
print ( "You will turn 100 year old in",age,"year")
```

OUTPUT:

```
Enter the Name:
W.Viviyan Richards
Enter the Age: 50
 hi.... W.Viviyan
Richards
You will turn 100 year old in 50 year
```

2.Create a program that asks the user for a number and prints out a list of all the divisors of that number.

```
n= int (input("Enter the Number:"))
print("The divisors of the number are:")
for i in range(1,n+1):    if(n%i==0):
print(i)
```

OUTPUT:

```
Enter the Number: 81
The divisors of the number are:
1
3
9
27
81
```

3.Take a string and check whether the string is a palindrome or not

```
my_str= input("Enter the String:") rev_str= reversed(my_str)  if list(my_str) ==
list(rev_str):    print("The string is a palindrome.") else:
  print("The string is not a palindrome.")
```

OUTPUT:

Enter the String: mam The
string is a palindrome.

4.Create a list a = [1, 4, 9, 16, 25, 36, 49, 64, 81, 100]. Write one line of Python that takes this list a and makes a new list that has only the odd elements of this list in it. (Use list comprehension) a = [1, 4, 9, 16, 25, 36, 49, 64, 81, 100]

b = [i for i in a if i % 2 != 0]

OUTPUT:

```
print(b)
[1, 9, 25, 49, 81]
```

5.Write a Python program that accepts a string and calculate the number of digits and letters.

```
st = input("Input a string :")
d=l=0 for
c in st:
   if c.isdigit():
d=d+1    elif
c.isalpha():
      l=l+1    else:
pass
print("Letters", l)
print("Digits", d)
```

OUTPUT:

Input a string : haridanieal98568432
Letters 11 Digits
8

6.Write a function to compute maximum of 3 numbers

x = [int(x) for x in input("Enter the three value: ") .split()] print(max(x))

OUTPUT:

Enter the three value: 12 5 99
99

7.Write a Python function that accepts a string and calculate the number of upper case letters and lower case letters def test(s): d={"UPPER_CASE":0, "LOWER_CASE":0} for c in s: if c.isupper(): d["UPPER_CASE"]+=1 elif c.islower():
d["LOWER_CASE"]+=1
else: pass
print ("Original String : ", s)
print ("No. of Upper case : ", d["UPPER_CASE"])
print ("No. of Lower case :", d["LOWER_CASE"])
test(str(input("Enter the String:")))

OUTPUT:
Enter the String: CalCulate The NumBer of upper case and LoWer CaSe in ThiS Sentences
Original String : CalCulate The NumBer of upper case and LoWer CaSe in ThiS Sentences No. of Upper case : 12 No. of Lower case : 44

8.Write a Python function that takes a list and returns a new list with unique elements of the first list.

```
from collections import Counter

def removeElements(lst, k):
counted = Counter(lst)
   return [el for el in lst if counted[el] == k]

lst = ['s','s','a',1,1,2,3,3,4,4,5] k=1
print(removeElements(lst, k))
```

OUTPUT:
['a', 2, 5]

SHORT REPORT:

I face some difficulty when I am doing this assignment. I did not know the meaning of palindrome and I didn't understood the 3rd programme I just ask my friend and solve it.

I didn't studied the programming languages before so please teach me little bit slower. It's a big drawback for attending online class for this course, because sometimes we face network problem or issues.