**STUDENT INFORMATION SEARCH USING DICTIONARY**

**QUESTION**:

Write a program to store students information like admission number, roll number, name and marks in a dictionary. Display information on the basis of the admission number as obtained as user input.

**CODE**:

a = input('Enter String: ')

opt = int(input('1) Print the count of letters in the string\n2) Print the number of upper-case, lower-case, vovels and digits\n3) Reverse the string and check whether its a palindrome\nEnter an option corresponding to you choice: '))

if opt == 1:

leng = {}

for i in a:

if i in leng:

leng[i] += 1

else:

leng[i]= 1

print(leng)

elif opt == 2:

upper = 0

lower = 0

vovel= 0

digit = 0

digitlist = ['1','2','3','4','5','6','7','8','9','0']

vovellist = ['a','e','i','o','u','A','E','I','O','U']

for i in a:

if 'A' <= i <= 'Z':

upper += 1

elif 'a' <= i <= 'z':

lower += 1

if i in digitlist:

digit += 1

if i in vovellist:

vovel += 1

print(f'Upper: {upper}\nLower: {lower}\nDigits: {digit}\nVovels: {vovel}')

elif opt == 3:

if a == a[::-1]:

print('It is a palindrome')

else:

print('Not a palindrome')

else:

print('Invalid Option')

**OUTPUT**:

Enter tuple: (1, 0, 2, 3, 4)

1) Accept an element to add to the tuple.

2) Display the largest and smallest of the tuple.

3) Update all even numbers by adding 2 and odd numbers by adding 3.

4) Perform a linear search of an element in a tuple.

Enter number corresponding to the option:1

Enter number to add to tuple: 567

The tuple is now (1, 0, 2, 3, 4, 567)

Enter tuple: (1, 0, 2, 3, 4)

1) Accept an element to add to the tuple.

2) Display the largest and smallest of the tuple.

3) Update all even numbers by adding 2 and odd numbers by adding 3.

4) Perform a linear search of an element in a tuple.

Enter number corresponding to the option:2

Small = 0

Large = 4

Enter tuple: (1, 0, 2, 3, 4)

1) Accept an element to add to the tuple.

2) Display the largest and smallest of the tuple.

3) Update all even numbers by adding 2 and odd numbers by adding 3.

4) Perform a linear search of an element in a tuple.

Enter number corresponding to the option:3

The tuple is now (1, 0, 2, 3, 4)

Enter tuple: (1, 0, 2, 3, 4)

1) Accept an element to add to the tuple.

2) Display the largest and smallest of the tuple.

3) Update all even numbers by adding 2 and odd numbers by adding 3.

4) Perform a linear search of an element in a tuple.

Enter number corresponding to the option:4

Enter element to search for: 1

Element is at position 0