**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 = list(eval(input('Enter tuple: ')))

large = a[0]

small = a[0]

inp = int(input('1) Accept an element to add to the tuple.\n2) Display the largest and smallest of the tuple.\n3) Update all even numbers by adding 2 and odd numbers by adding 3.\n4) Perform a linear search of an element in a tuple.\nEnter number corresponding to the option:'))

if inp == 1:

a += [int(input('Enter number to add to tuple: '))]

print(f'The tuple is now {tuple(a)}')

elif inp == 2:

for i in a:

if i > large:

large = i

elif i < small:

small = i

print(f'Small = {small}\nLarge = {large}')

elif inp == 3:

for i in range(len(a)):

a[i] += 2 if a[i]%2 == 0 else 3

print(f'The tuple is now {tuple(a)}')

elif inp == 4:

pos = 0

element = int(input('Enter element to search for: '))

if element in a:

for i in range(len(a)):

if a[i] == element:

pos = i

print(f'Element is at position {pos}')

else:

print('Element not found.')

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