

DATE 5/2023

Activity 2.1.1 Write a program to illustrate iteration over a list.

```
list 1 = [10, 10.5, 'Apple', 34, 47]
```

```
length = len(list1)
```

```
while (1):
```

```
    print('*** List Iteration ***')
```

```
    print('1. Using For loop')
```

```
    print('2. Using for with range')
```

```
    print('3. Using while')
```

```
    print('4. Using List Comprehension')
```

```
    print('5. Using Enumeration')
```

```
    print('6. Exit')
```

```
    m = int(input('Enter your choice'))
```

```
    if (m == 1):
```

```
        for i in list1:
```

```
            print(i)
```

```
    elif (m == 2):
```

```
        for i in range(length):
```

```
            print(list1[i])
```

```
    elif (m == 3):
```

```
        i = 0
```

```
        while i < length:
```

```
            print(list1[i])
```

```
            i += 1
```

```
    elif (m == 4):
```

```
        print(i) for i in list1
```

```
    elif (m == 5):
```

```
        for i, val in enumerate(list1):
```

```
            print(i, " ", val)
```

```
    else:
```

```
*****List Iteration*****
```

```
1. Using for Loop
```

```
2. using for with range
```

```
3. Using While
```

```
4. Using List Comprehension
```

```
5. Using Enumeratuoin
```

```
6. Exit
```

```
Enter the Choice: 2
```

```
10
```

```
10.5
```

```
Apple
```

```
34
```

```
47
```

```
*****List Iteration*****
```

```
1. Using for Loop
```

```
2. using for with range
```

```
3. Using While
```

```
4. Using List Comprehension
```

```
5. Using Enumeratuoin
```

```
6. Exit
```

```
Enter the Choice: 1
```



```
print ('Exit from the program')
break;
```

Activity 2.2 v) Write a program to illustrate iteration over the dictionary.

```
d = {'key1': 1, 'key2': 2, 'key3': 3}
```

```
for i in d:
```

```
    print (i)
```

```
print (list (d))
```

```
print (type (list (d)))
```

```
while (1):
```

```
    print ('*** DICTIONARY ITERATION ***')
```

```
    print ('1. Through Dictionary Keys()')
```

```
    print ('2. Through Dictionary values()')
```

```
    print ('3. Exit')
```

```
    c = int (input ('Enter your choice: '))
```

```
    if (c == 1):
```

```
        for k in d.keys():
```

```
            print (k)
```

```
        print (d.keys())
```

```
        print (type (d.keys()))
```

```
        print (type (list (d)))
```

```
    elif (c == 2):
```

```
        for v in d.values():
```

```
            print (v)
```

```
        print (d.values())
```

```
        print (type (d.values()))
```

```
    elif (c == 3):
```

```
        for k, v in d.items():
            break;
```

```
key1
key2
key3
['key1', 'key2', 'key3']
<class 'list'>
*****DICTIONARY ITERATION*****
1 Through Dictionary Keys()
2 Through Dictionary values()
3 Through Dictionary Items()
4 EXIT
Enter your Choice: 2
1
2
3
dict_values([1, 2, 3])
<class 'dict_values'>
*****DICTIONARY ITERATION*****
1 Through Dictionary Keys()
2 Through Dictionary values()
3 Through Dictionary Items()
4 EXIT
Enter your Choice: 1
```