Lambda Assignment

#1 Write a Python program to create a list and slice the first three elements.

```
# a=list(map(int,input("Enter Elements for list(Space_seprated): ").split()))
# (lambda a:print(a[:3]))(a)
```

#2 Create a tuple and demonstrate how to concatenate two tuples.

```
# t=tuple(map(int,input("Enter nos: ").split()))
# t2=t+(10,20,30)
# print(t2)
# output:
# Enter nos: 101 102 103 104
# (101, 102, 103, 104, 10, 20, 30)
```

#3 Write a program to check if a given number is even or odd using an if-else statement.

```
# (lambda n: print("Even") if n%2==0 else print('Odd'))(int(input("Enter No: ")))
# output:
# Enter No: 4
# Even
# Enter No: 3
# Odd
```

#4 Create a dictionary of 5 items and use a loop to print all keys and values.

```
# d={'lav':4,'kaira':89,'mira':90,'rahul':24}
# for i,v in d.items():
#     print(i,v)
# output:
# lav 4
# kaira 89
# mira 90
# rahul 24
```

#5 Write a function to calculate the product of two numbers provided by the user.

```
# (lambda n1,n2:print(n1*n2))(int(input("Enter n1: ")),int(input('Enter n2: ')))
# output:
# Enter n1: 12
# Enter n2: 12
# 144
```

#6 Use a lambda function to check if a number is divisible by 3.
(lambda n: print("Number is divisible by 3")if n%3==0 else print("Number is not divisible by 3"))(int(input("enter no: ")))
output:
enter no: 9
Number is divisible by 3
enter no: 5
Number is not divisible by 3

#7 Demonstrate slicing to extract the last three elements from a list and a tuple.
slicing is used to extract a part of list or tuple
(lambda l,t:print((l[-3:],t[-3:])))(list(map(int,input("Enter Elements: ").split())),tuple(map(int,input("Enter Tople elements: ").split())))
output:
([102, 103, 104], (30, 40, 50))

#8 Write a Python program that uses nested if-else to determine if a given year is a leap year.

#9 Create a set and demonstrate how to find the intersection of two sets.
with help of intersection function you can find intersection of two sets
s1={1,2,3,4}
s2={3,7,8,9,0}
print(s1.intersection(s2))
output:
{3}

#10 Use a for loop to calculate the sum of all numbers in a user-defined list.
(lambda l: sum(l))(list(map(int,input('Enter Elements: ').split())))

#11 Write a Python function to check if a given string is a palindrome.
(lambda n:print("palidrome") if n==n[::-1] else print("Not palindrome"))(input("Enter string: "))
output:
Enter string: woow
palidrome
Enter string: lavanya
Not palindrome

#12 Use a lambda function to sort a dictionary by its values.

```
d={1:23,2:56,3:90,4:7,5:1}
print(sorted(d.items(),key=lambda v:v[1]))
```

#13 Write a program to iterate over a tuple and display only the elements at even indices.

```
# t=tuple(map(int,input("Enter elements: ").split()))
# l=[]
# print(tuple(t[i] for i in range(len(t)) if i%2==0))
```

#14 Create a program using if-elif-else to assign grades based on user input (90+ = A, 80–89 = B, etc.).

```
# n=int(input("Enter grades: "))
# if n>=90:
#     print('A')
# elif(n>=80 and n<=89):
#     print('B')
# elif(n>=40 and n<=79):
#     print('C')
# else:
#     print('Fail')
# output:
# Enter grades: 98
# A
# Enter grades: 32
# Fail
```

#15 Combine a list and a tuple into a single list and remove duplicate elements using a set.

```
# l=[10,20,30,10,30]
# t=(20,30,40,10)
# l=list(t)+l
# l=set(l)
# print(l)
# output:
# {40, 10, 20, 30}
```