

ABHISHEK SHARMA

CS 2ND YEAR

SECTION : "I"

ROLL NO.: 01

ENROLLMENT NO.: 12019009001127

DATA STRUCTURE AND ALGORITHM LABORATORY

WEEK : 8

ASSIGNMENT : 8

DATE : 01.09.2020

HACKERRANK ID : 12019009001127_I

Q1. create a list having the name,age,salary and address of a person. enter name,age,salary and address as input.

CODE :

```
name = input()
age = int(input())
salary = input()
address = input()
print("['{}', {}, {}, '{}']".format(name,age,salary,address))
```

OUTPUT :

Testcase 0 

Congratulations, you passed the sample test case.

Click the **Submit Code** button to run your code against all the test cases.

Input (stdin)

```
alan
35
50000.50
infinite street
```

Your Output (stdout)

```
['alan', 35, 50000.50, 'infinite street']
```

Expected Output


```
['alan', 35, 50000.50, 'infinite street']
```

Q2. take a string as input. use negative slicing to print a substring

CODE :

```
str = input()
start = int(input())
end = int(input())
n = len(str)
a = n - (start - end)
print ("'{}'".format(str[(-a) : (-end)]))
```

OUTPUT :

Testcase 0 

Congratulations, you passed the sample test case.

Click the **Submit Code** button to run your code against all the test cases.

Input (stdin)

```
alan turing
6
1
```

Your Output (stdout)

```
'turin'
```

Expected Output

```
'turin'
```

Q3. given a list in python. delete the element of a given position

CODE :

```
x = input()
n = int(input())
list1 = [x]
a = x.split(sep = ' ')
del a[n]
print (*a)
```

OUTPUT :

Testcase 0 

Congratulations, you passed the sample test case.

Click the **Submit Code** button to run your code against all the test cases.

Input (stdin)

```
1 2 3 4 5 6 7
2
```

Your Output (stdout)

```
1 2 4 5 6 7
```

Expected Output

```
1 2 4 5 6 7
```

Q4. given a list of elements. find the maximum and minimum of the list using library function

CODE :

```
l = list(map(int, input().split(' ')))
print ('MAX =', max(l))
print ('MIN =', min(l))
```

OUTPUT :

```
In [1]: l = list(map(int, input().split(' ')))
print ('MAX =', max(l))
print ('MIN =', min(l))
```

```
1 2 3 4 5 8 6
MAX = 8
MIN = 1
```

Q5. create a list of tuples.

CODE :

```
tup1 = tuple(int(x) for x in input().split())
tup2 = tuple(int(x) for x in input().split())
tup3 = tuple(int(x) for x in input().split())
t4 = [tup1, tup2, tup3]
print(t4)
```

OUTPUT :

Testcase 0 

Congratulations, you passed the sample test case.

Click the **Submit Code** button to run your code against all the test cases.

Input (stdin)

```
1 2 3
10 20 30
4 5 6
```

Your Output (stdout)

```
[(1, 2, 3), (10, 20, 30), (4, 5, 6)]
```

Expected Output


```
[(1, 2, 3), (10, 20, 30), (4, 5, 6)]
```

Q6. given a string. convert it into a tuple

CODE :

```
a=input()  
b=tuple(a)  
print("{}".format(b))
```

OUTPUT :

Testcase 0 

Congratulations, you passed the sample test case.

Click the **Submit Code** button to run your code against all the test cases.

Input (stdin)

good dog

Your Output (stdout)

('g', 'o', 'o', 'd', ' ', 'd', 'o', 'g')

Expected Output

('g', 'o', 'o', 'd', ' ', 'd', 'o', 'g')

Q7. concatenate 3 given tuples

CODE :

```
t1 = tuple(int(x) for x in input().split())
t2 = tuple(int(x) for x in input().split())
t3 = tuple(int(x) for x in input().split())
t4 = (t1, t2, t3)
print(t4)
```

OUTPUT :

Testcase 0 

Congratulations, you passed the sample test case.

Click the **Submit Code** button to run your code against all the test cases.

Input (stdin)

```
1 2
4 5
8 9
```

Your Output (stdout)

```
((1, 2), (4, 5), (8, 9))
```

Expected Output

```
((1, 2), (4, 5), (8, 9))
```

Q8. given a tuple. find the sum of its elements

CODE :

```
t1 = tuple(int(x) for x in input().split())  
res = sum(list(t1))  
print("sum = " +str(res))
```

OUTPUT :

Testcase 0 

Congratulations, you passed the sample test case.

Click the **Submit Code** button to run your code against all the test cases.

Input (stdin)

```
1 2 3 4 5
```

Your Output (stdout)

```
sum = 15
```

Expected Output

```
sum = 15
```


Q9. given a tuple. print its element in between a range

CODE :

```
x = input()

t1 = x.split(sep=' ')
y = len(t1)
for i in range(0,y,1):
    t1[i] = int(t1[i])
t1 = tuple(t1)
start = int(input())
end = int(input())
print(t1[start:end:1])
```

OUTPUT :

Testcase 0 

Congratulations, you passed the sample test case.

Click the **Submit Code** button to run your code against all the test cases.

Input (stdin)

```
1 2 3 4 5 6
3
6
```

Your Output (stdout)

```
(4, 5, 6)
```

Expected Output

```
(4, 5, 6)
```