

Tuple

01) WAP to find sum of tuple elements.

```
t1 = (1,2,3,4,5,6)
sum = 0
for i in t1:
    sum += i
print(sum)
```

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02) WAP to find Maximum and Minimum K elements in a given tuple.

```
t2 = (99,87,23,41,56)
max = max(t2)
min = min(t2)
print("Maximum is:",max)
print("Minimum is:",min)
```

Maximum is: 99
Minimum is: 23

03) WAP to find tuples which have all elements divisible by K from a list of tuples.

```
data = [(6, 12, 18), (4, 9, 15), (10, 20, 30), (8, 16, 24)]
K = int(input("Enter Key:"))
result = []

for tup in data:
    for elem in tup:
        if elem % K != 0:
            break
    else:
        result.append(tup)

print(result)
```

Enter Key: 5

[(10, 20, 30)]

04) WAP to create a list of tuples from given list having number and its cube in each tuple.

```
numbers = [1, 2, 3, 4, 5]
result = [(n, n**3) for n in numbers]
print(result)
[(1, 1), (2, 8), (3, 27), (4, 64), (5, 125)]
```

05) WAP to find tuples with all positive elements from the given list of tuples.

```
tuples_list = [(1, 2, 3), (-1, 2, 3), (4, 5, 6), (0, 7, 8)]
result = [t for t in tuples_list if all(x > 0 for x in t)]
print(result)
[(1, 2, 3), (4, 5, 6)]
```

06) WAP to add tuple to list and vice – versa.

```
my_list = [1, 2, 3]
my_tuple = (4, 5)

result_list = my_list + list(my_tuple)
result_tuple = my_tuple + tuple(my_list)

print(result_list)
print(result_tuple)

[1, 2, 3, 4, 5]
(4, 5, 1, 2, 3)
```

07) WAP to remove tuples of length K.

```
tuples_list = [(1, 2, 3), (-1, 2, 3), (4, 5, 6), (7, 8)]
k=int(input("Enter key:"))
result = [t for t in tuples_list if len(t)!=k]
print(result)
Enter key: 2
[(1, 2, 3), (-1, 2, 3), (4, 5, 6)]
```

08) WAP to remove duplicates from tuple.

```
t1 = (12,1,1,12,14)
s = set(t1)
t = tuple(s)
print("Result is:",t)
Result is: (1, 12, 14)
```

09) WAP to multiply adjacent elements of a tuple and print that resultant tuple.

```
my_tuple = (1, 2, 3, 4, 5)
result = []

for i in range(len(my_tuple) - 1):
    result.append(my_tuple[i] * my_tuple[i + 1])

result_tuple = tuple(result)
print(result_tuple)
(2, 6, 12, 20)
```

10) WAP to test if the given tuple is distinct or not.

```
t1 = (1,2,3,4,5,6)
l_t = len(t1)
s = set(t1)
l_s = len(s)
if l_t == l_s:
    print("Tuple is Distinct")
else:
    print("Tuple is not Distinct")
Tuple is Distinct
```