

## Python program to create a list of tuples from given list having number and its cube in each tuple

```
# input n
# output : [(1,1),(2,8),(3,27),...]

n=int(input("enter the value of n")) # 5

#
list1=[]
for num in range(1,n+1): # 1 2 3 4 5
    list1.append((num,num**3))
print(list1)

#
list2=[(num,num**3) for num in range(1,n+1)]
print(list2)
```

### Output:

```
enter the value of n5
[(1, 1), (2, 8), (3, 27), (4, 64), (5, 125)]
[(1, 1), (2, 8), (3, 27), (4, 64), (5, 125)]
```

## Python – Adding Tuple to List and vice – versa

```
>>> list1=[10,20,30,40,50]
>>> t1=(60,70,80)
>>> list1=list1+list(t1)
>>> print(list1)
[10, 20, 30, 40, 50, 60, 70, 80]
>>> print(t1)
(60, 70, 80)
>>> t1=t1+tuple(list1)
>>> print(t1)
(60, 70, 80, 10, 20, 30, 40, 50, 60, 70, 80)
```

### Example:

```
>>> list1=[(value,chr(value)) for value in range(65,91)]
```

```
>>> print(list1)
[(65, 'A'), (66, 'B'), (67, 'C'), (68, 'D'), (69, 'E'), (70, 'F'), (71, 'G'), (72, 'H'),
(73, 'I'), (74, 'J'), (75, 'K'), (76, 'L'), (77, 'M'), (78, 'N'), (79, 'O'), (80, 'P'), (81,
'Q'), (82, 'R'), (83, 'S'), (84, 'T'), (85, 'U'), (86, 'V'), (87, 'W'), (88, 'X'), (89,
'Y'), (90, 'Z')]
```

### **# Python – Join Tuples if similar initial element**

# Input : test\_list = [(5, 6), (5, 7), (5, 8), (6, 10), (7, 13)]

# Output : [(5, 6, 7, 8), (6, 10), (7, 13)]

```
test_list = [(5, 6), (5, 7), (5, 8), (6, 10), (7, 13)]
```

```
output=[]
```

```
index=0
```

```
l=len(test_list)
```

```
while index<l:
```

```
    e=test_list[index][0]
```

```
    j=index+1
```

```
    l1=[]
```

```
    while j<l:
```

```
        e1=test_list[j][0]
```

```
        if e==e1:
```

```
            l1.append(test_list[j][1])
```

```
            del test_list[j]
```

```
            l=l-1
```

```
            j=j-1
```

```
    j=j+1
```

```
    if len(l1)==0:
```

```
        l1.insert(0,e)
```

```
        output.append(tuple(l1))
```

```
    index=index+1
```

```
print(output)
```