```
print(7**4)
```

```
2401
```

```
s = "Hi there Sam"
lst = s.split(' ')

print(lst)
```

```
['Hi', 'there', 'Sam']
```

```
planet = "Earth"
diameter = 12742
print( 'The diameter of {} is {}
kilometers.' .format(planet,diameter));
```

```
The diameter of Earth is 12742 kilometers.
```

```
lst = [1,2,[3,4],[5,[100,200,['hello']],23,11],1,7]
```

```
lst = [1,2,[3,4],[5,[100,200,['hello']],23,11],1,7]
a=lst[3][1][2];
print(a)
```

```
['hello']
```

```
d = {'k1':[1,2,3,{'tricky':['oh','man','inception',{'target':
[1,2,3,'hello']}]}]}
```

```
d = {'k1':[1,2,3,{'tricky':['oh','man','inception',{'target':
[1,2,3,'hello']}]}]}
print(d['k1'][3]["tricky"][3]['target'][3])
```

```
hello
```

```
# Tuple is immutable whereas list is  mutable.
#Tuples operations are safe.
#Tuples consumes less memory whereas list consumes more memory.

def domainGet(email):
    print("Your domain is: " + email.split('@')[-1])

email = input("Please enter your email: >")
domainGet(email)
```

```
Please enter your email: >rizwanalavudeen88@gmail.com
Your domain is: gmail.com
```

```
def findDog(st):
    if 'dog' in st.lower():
        print("True")
    else:
        print("False")
```

```
st = "Is there a dog here?"
findDog(st)
```

```
True
```

```
value = 'This dog runs faster than the other dog dude!';

def countdogs(value):
    count = 0
    for word in value.lower().split():
        if word == 'dog':
            count = count + 1
            print(count)

countdogs(value)
```

```
1
2
```

```
def caught_speeding(speed, is_birthday):

    if is_birthday:
        speeding = speed - 5
    else:
        speeding = speed

    if speeding > 80:
        return 'Big Ticket'
    elif speeding > 60:
        return 'Small Ticket'
    else:
        return 'No Ticket'

caught_speeding(81,False)
```

```
{"type":"string"}
```

```
caught_speeding(81,True)
```

```
{"type":"string"}
```

```
emp_name = ['Zenith','Yusra','Saba','Zoya','Haada']
emp_salary = [25000,15700,50000,8600,14320]
for emp_name, emp_salary in zip(emp_name, emp_salary):

    print(emp_name, emp_salary)
```

```
Zenith 25000
Yusra 15700
Saba 50000
```

Zoya 8600
Haada 14320

```
dict1 = {"empid": '1', "empname": 'saba', "basicpay": '50000'}
dict2 = {"deptname": 'AI', "deptid": '432'}

print({**dict1, **dict2})
```

```
{'empid': '1', 'empname': 'saba', 'basicpay': '50000', 'deptname':
'AI', 'deptid': '432'}
```