```
a = 5
print(type(a))
# <class 'int'>
# % %
b = 3.2
print(type(b))
# <class 'float'>
# 응 응
c = True
print(type(c))
# <class 'bool'>
s = 'Bilgisayar'
print(type(s))
# <class 'str'>
# 응 응
n = None
print(type(n))
# <class 'NoneType'>
a = 5; b = 10; c = a + b; print(c)
# 15
# 응 응
a = 0.3
print(a)
b = 0.2
print(b)
c = a - b
print(c) # 0.0999999999999998
if (c == 0.1):
    print("True")
else:
    print("False")
# False
# 응응
a = 10
if (a > 0):
    print("Pozitif bir sayı girdiniz")
    print("Girdiğiniz sayı 0'dan büyük bir sayıdır")
elif (a < 0):
    print("Negatif bir sayı girdiniz")
else:
    print("Girdiğiniz sayı sıfırdır")
# 응응
result = 5 ** 4
```

```
print(result) # 625
# 응응
result = 10 / 3
# 응응
result = 10 // 3
print(result) # 3
# 응응
a = 10; b = 20; c = 30
print(a, b, c, sep=', ')
print(a, b, c, sep='')
print(a, b, c, sep='', end='.')
1.1.1
10, 20, 30
102030
102030.
1.1.1
# 응응
a = int(input('Bir değer giriniz : '))
result = a ** 2
print(result)
# 응응
# Dolaşılabilir (iterable) Nesneler
# listeler, kümeler, sözlükler, demetler, stringler
# Listeler (Lists)
a = [1, 2, 3]
print(a) # [1, 2, 3]
print(type(a)) # <class 'list'>
x = [1, 2.5, 'Ali', 'Murat']
print(x) # [1, 2.5, 'Ali', 'Murat']
# % %
x = [1, 2.5, 'Ali', 'Murat', [20, 30, 'Kemal']]
print(x)
# 응 응
a = [10, 20, 30, 40, 50]
print(a[-1]) # 50
# 응 응
a = [1, [2, 3, 4], 5, [6, 7, 8]]
print(a[1][-1]) # 4
print(a[-1][-2]) # 7
# 응 응
a = [10, 20, 30, 40, 50, 60, 70, 80, 90, 100]
```

```
print(a[1:3]) # [20, 30]
print(a[0:len(a)]) # [10, 20, 30, 40, 50, 60, 70, 80, 90, 100]
print(a[7:15])
print(a[-20:3]) # [10, 20, 30]
print(a[::2]) # [10, 30, 50, 70, 90]
print(a[8: 1:-1]) # [90, 80, 70, 60, 50, 40, 30]
# 응응
a = [10, 20, 30, 40, 50, 60, 70, 80]
print('b = ', id(b)) # 4379790784
print('a = ', id(a)) # 4379790784
a = [10, 20, 30, 40, 50, 60, 70, 80]
b = a[:]
print('b = ', id(b)) # b = 4379798848
print('a = ', id(a)) # a = 4379789632
# 응응
a = [10, 20, 30, 40, 50, 60, 70, 80]
b = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
c = a + b
print(c)
# [10, 20, 30, 40, 50, 60, 70, 80, 1, 2, 3, 4, 5, 6, 7, 8, 9,
107
# 응응
a = [10, 20, 30, 40, 50, 60, 70]
b = list(a)
print('a = ', id(a)) # a = 4379797248
print('b = ', id(b)) # b = 4379870400
# %%
a = list('Bursa Uludağ Üniversitesi')
print(a)
# %%
a = [10, 20, 30, 40, 50, 60, 70]
a[2:4] = [1, 2, 3]
print(a) # [10, 20, 1, 2, 3, 50, 60, 70]
# 응응
a = [10, 20, 30, 40, 50, 60, 70]
a[2:4] = [13]
print(a) # [10, 20, 13, 50, 60, 70]
# 응응
a = [10, 20, 30, 40, 50, 60, 70]
a[2:4] = []
print(a) # [10, 20, 50, 60, 70]
# %%
a = [10, 20, 30, 40, 50, 60, 70]
```

```
a[0:0] = [1, 2]
print(a) # [1, 2, 10, 20, 30, 40, 50, 60, 70]
a = [10, 20, 30, 40, 50, 60, 70, 80, 90]
a[0:8:2] = [10, 20, 30]
print(a) # ERROR!!!
# Listenin elemanlarının dilimleme yoluyla güncellendiği
durumlarda,
# dilimlemede step değeri verilmişse atanacak listenin tam
secilen eleman
# sayısı kadar olması gerekmaktedir.
# %%
# range fonksiyonu
r = range(10)
l = list(r)
print(1) # [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
# 응응
l = list(range(10))
print(1) # [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
# 응응
1 = list(range(10, 20, 2))
print(1) # [10, 12, 14, 16, 18]
# 응응
1 = list(range(100, 90, -2))
print(1) # [100, 98, 96, 94, 92]
# 응응
a = [1, 2, 3, 5.6, 'Yaren', 'Yağmur', 'Mehmet', 10]
print(3 in a) # True
print('Ahmet' not in a) # True
# 응응
a = [1, 2, 3, 5.6, 'Yaren', 'Ahmet']
a.append(100)
print(a) # [1, 2, 3, 5.6, 'Yaren', 'Ahmet', 100]
# 응응
a = [1, 2, 3, 5.6, 'Yaren', 'Ahmet']
a.append([10, 20, 30, 40, 50, 60, 70])
print(a) # [1, 2, 3, 5.6, 'Yaren', 'Ahmet', [10, 20, 30, 40, 50,
60, 7011
# 응응
a = [1, 2, 3, 5.6, 'Yaren', 'Ahmet']
a.extend([10, 20, 30])
print(a) # [1, 2, 3, 5.6, 'Yaren', 'Ahmet', 10, 20, 30]
# 응응
a = [10, 20, 30, 40, 50, 60, 70]
a.insert(2, 100)
print(a) # [10, 20, 100, 30, 40, 50, 60, 70]
```

```
# 응응
a = [10, 20, 30, 40, 50, 60, 70]
a[2:2] = [100]
print(a) # [10, 20, 100, 30, 40, 50, 60, 70]
# 응응
a = [10, 20, 30, 40, 50, 60, 70]
a.pop()
print(a) # [10, 20, 30, 40, 50, 60]
a = [10, 20, 30, 40, 50, 60, 70]
a.pop(-1)
print(a) # [10, 20, 30, 40, 50, 60]
# 응응
a = [10, 20, 30, 40, 50, 60, 70]
a.clear()
print(a) # []
# %%
a = [10, 20, 30, 'Ali', 50, 60, 70, 'Muhammed', 'Ali']
a.remove('Ali')
print(a) # [10, 20, 30, 50, 60, 70, 'Muhammed', 'Ali']
# %%
a = [10, 20, 30, 'Ali', 50, 60, 70, 'Muhammed', 'Ali']
print(a.index('Ali')) # 3
# %%
a = [10, 20, 30, 'Ali', 50, 60, 70, 'Muhammed', 'Ali']
print(a.index('Ali', 4)) # 8
# 응응
a = [10, 20, 30, 'Ali', 50, 60, 'Muhammed', 'Ali']
print(a.count('Ali')) # 2
# 응응
a = [3, 58, 2, 9, 21, 90, 32, 45, 13]
a.sort()
print(a) # [2, 3, 9, 13, 21, 32, 45, 58, 90]
# 응응
a = [3, 58, 2, 9, 21, 90, 32, 45, 13]
a.sort(reverse=True)
print(a) # [90, 58, 45, 32, 21, 13, 9, 3, 2]
names = ['Ali', 'Muhammed', 'Veli', 'Fatma', 'Murat', 'Yaren',
'Ahmet']
names.sort()
print(names) # ['Ahmet', 'Ali', 'Fatma', 'Muhammed', 'Murat',
'Veli', 'Yaren']
# 응응
names = ['Ali', 'Muhammed', 'Veli', 'Fatma', 'Murat', 'Yaren',
'Ahmet']
names.sort(key=len)
```

```
print(names) # ['Ali', 'Veli', 'Fatma', 'Murat', 'Yaren',
'Ahmet', 'Muhammed']
# 응응
names = ['Ali', 'Muhammed', 'Veli', 'Fatma', 'Murat', 'Yaren',
'Ahmet']
names.sort(key=str.lower)
print(names) # ['Ahmet', 'Ali', 'Fatma', 'Muhammed', 'Murat',
'Veli', 'Yaren']
# %%
a = [3, 58, 2, 9, 21, 90, 32]
b = a.copy()
print(b) # [3, 58, 2, 9, 21, 90, 32]
# 응응
a = 'Ali'
b = 'Yaren'
c = 'Mehmet'
# 응응
[a, b, c] = ['Atakan', 'Rüzgar', 'Ahmet']
print(a)
```