```python
# =============== listscore  ===============
score = [ 88, 95, 70, 100, 99 ]
sum = 0
for s in score:
    sum += s
print("총점 : ", sum)
print("평균 : ", sum / len(score))

# =============== listslice  ===============
nums = [0,1,2,3,4,5,6,7,8,9]
print(nums[2:5])          # 2~5까지
print(nums[:4])           # 처음부터 4까지
print(nums[6:])           # 6에서 끝까지
print(nums[1:7:2])        # 1~7까지 하나씩 건너뛰며

# =============== listassign  ===============
score = [ 88, 95, 70, 100, 99 ]
print(score[2])      # 70
score[2] = 55        # 값 변경
print(score[2])      # 55

# =============== listreplace  ===============
nums = [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
nums[2:5] = [20, 30, 40]
print(nums)
nums[6:8] = [90, 91, 92, 93, 94]
print(nums)

# =============== rangeremove  ===============
nums = [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
nums[2:5] = []
del nums[4]
print(nums)

# =============== listcat  ===============
list1 = [1, 2, 3, 4, 5]
list2 = [10, 11]
listadd = list1 + list2
print(listadd)
listmulti = list2 * 3
```

```python
# ============== nestlist  ==============
lol = [ [1, 2, 3], [4, 5], [6, 7, 8, 9]]
print(lol[0])
print(lol[2][1])

for sub in lol:
    for item in sub:
        print(item, end=' ')
    print()

# ============== nestscore  ==============
score = [
    [88, 76, 92, 98],
    [65, 70, 58, 82],
    [82, 80, 78, 88]
    ]

total = 0
totalsub = 0
for student in score:
    sum = 0
    for subject in student:
        sum += subject
    subjects = len(student)
    print("총점 %d, 평균 %.2f" % (sum, sum / subjects))
    total += sum
    totalsub += subjects
print("전체평균 %.2f" % (total / totalsub))

# ============== listcomp  ==============
nums = [n * 2 for n in range(1, 11)]
for i in nums:
    print(i, end = ', ')

# ============== listinsert  ==============
nums = [1, 2, 3, 4]
nums.append(5)
nums.insert(2, 99)
print(nums)

# ============== insertrange  ==============
```

```python
nums = [1, 2, 3, 4]
nums[2:2] = [90, 91, 92]
print(nums)

nums = [1, 2, 3, 4]
nums[2] = [90, 91, 92]
print(nums)

# ============== extend  ==============
list1 = [1, 2, 3, 4, 5]
list2 = [10, 11]
list1.extend(list2)
print(list1)

# ============== listremove  ==============
score = [ 88, 95, 70, 100, 99, 80, 78, 50 ]
score.remove(100)
print(score)
del(score[2])
print(score)
score[1:4] = []
print(score)

# ============== pop  ==============
score = [ 88, 95, 70, 100, 99 ]
print(score.pop())
print(score.pop())
print(score.pop(1))
print(score)

# ============== listindex  ==============
score = [ 88, 95, 70, 100, 99, 80, 78, 50 ]
perfect = score.index(100)
print("만점 받은 학생은 " + str(perfect) + "번입니다.")
pernum = score.count(100)
print("만점자 수는 " + str(pernum) + "명입니다")

# ============== listmin  ==============
score = [ 88, 95, 70, 100, 99, 80, 78, 50 ]
print("학생 수는 %d명입니다." % len(score))
print("최고 점수는 %d점입니다." % max(score))
```

```python
print("최저 점수는 %d점입니다." % min(score))

# ============== listin  ==============
ans = input("결제 하시겠습니까? ")
if ans in ['yes', 'y', 'ok', '예', '당근']:
    print("구입해 주셔서 감사합니다.")
else:
    print("안녕히 가세요.")

# ============== sort  ==============
score = [ 88, 95, 70, 100, 99 ]
score.sort()
print(score)
score.reverse()
print(score)

# ============== sort2  ==============
country = ["Korea", "japan", "CHINA", "america"]
country.sort()
print(country)
country.sort(key = str.lower)
print(country)

# ============== sorted  ==============
score = [ 88, 95, 70, 100, 99 ]
score2 = sorted(score)
print(score)
print(score2)

# ============== tuplescore  ==============
score = ( 88, 95, 70, 100, 99 )
sum = 0
for s in score:
    sum += s
print("총점 : ", sum)
print("평균 : ", sum / len(score))

# ============== onetuple  ==============
tu = 2,
value = 2
print(tu)
```

```python
print(value)

# ============== tupleop  ==============
tu = 1, 2, 3, 4, 5
print(tu[3])          # 가능
print(tu[1:4])        # 가능
print(tu + (6, 7))    # 가능
print(tu * 2)         # 가능
tu[1] = 100           # 불가능
del tu[1]             # 불가능

# ============== unpacking  ==============
tu = "이순신", "김유신", "강감찬"
lee, kim, kang = tu
print(lee)
print(kim)
print(kang)

# ============== swap  ==============
a, b = 12, 34
print(a, b)
a, b = b, a
print(a, b)

# ============== tworeturn  ==============
import time

def gettime():
    now = time.localtime()
    return now.tm_hour, now.tm_min

result = gettime()
print("지금은 %d시 %d분입니다" % (result[0], result[1]))

# ============== divmod  ==============
d, m = divmod(7, 3)
print("몫", d)
print("나머지", m)

# ============== convertlist  ==============
score = [ 88, 95, 70, 100, 99 ]
```

```
tu = tuple(score)
#tu[0] = 100
print(tu)
li = list(tu)
li[0] = 100
print(li)
```