

In [81]:

```
break19 = None
break18 = None
with open("도로교통공단_월별_교통사고(2018).csv", "r", encoding="euc-kr") as f:
    break19 = f.readlines()
with open("도로교통공단_월별_교통사고(2019).csv", "r", encoding="euc-kr") as d:
    break18 = d.readlines()

break18_num = [] #18년도 교통사고 월별 현황
break19_num = [] #19년도 교통사고 월별 현황

for i, line in enumerate(break19):
    if i == 0:
        continue
    item = line.strip().split(",")
    break19_num.append(int(item[1].replace("'", '')))
for j, line in enumerate(break18):
    if j == 0:
        continue
    item = line.strip().split(",")
    break18_num.append(int(item[1].replace("'", '')))
print(break19_num)
print(break18_num)
```

[17026, 16208, 17022, 17992, 18636, 18082, 18699, 18335, 18371, 19738, 19029, 18010]
[16552, 14752, 18133, 19104, 20779, 18968, 19234, 19992, 19331, 21690, 21517, 19548]

In [82]:

```
import numpy
from matplotlib import pyplot
from sample import label

mon = numpy.arange(len(label))
print(mon)
print(label)
pyplot.rcParams["font.family"] = "Malgun Gothic"
pyplot.rcParams["font.size"] = 12
pyplot.rcParams["figure.figsize"] = (15,10)

pyplot.figure()

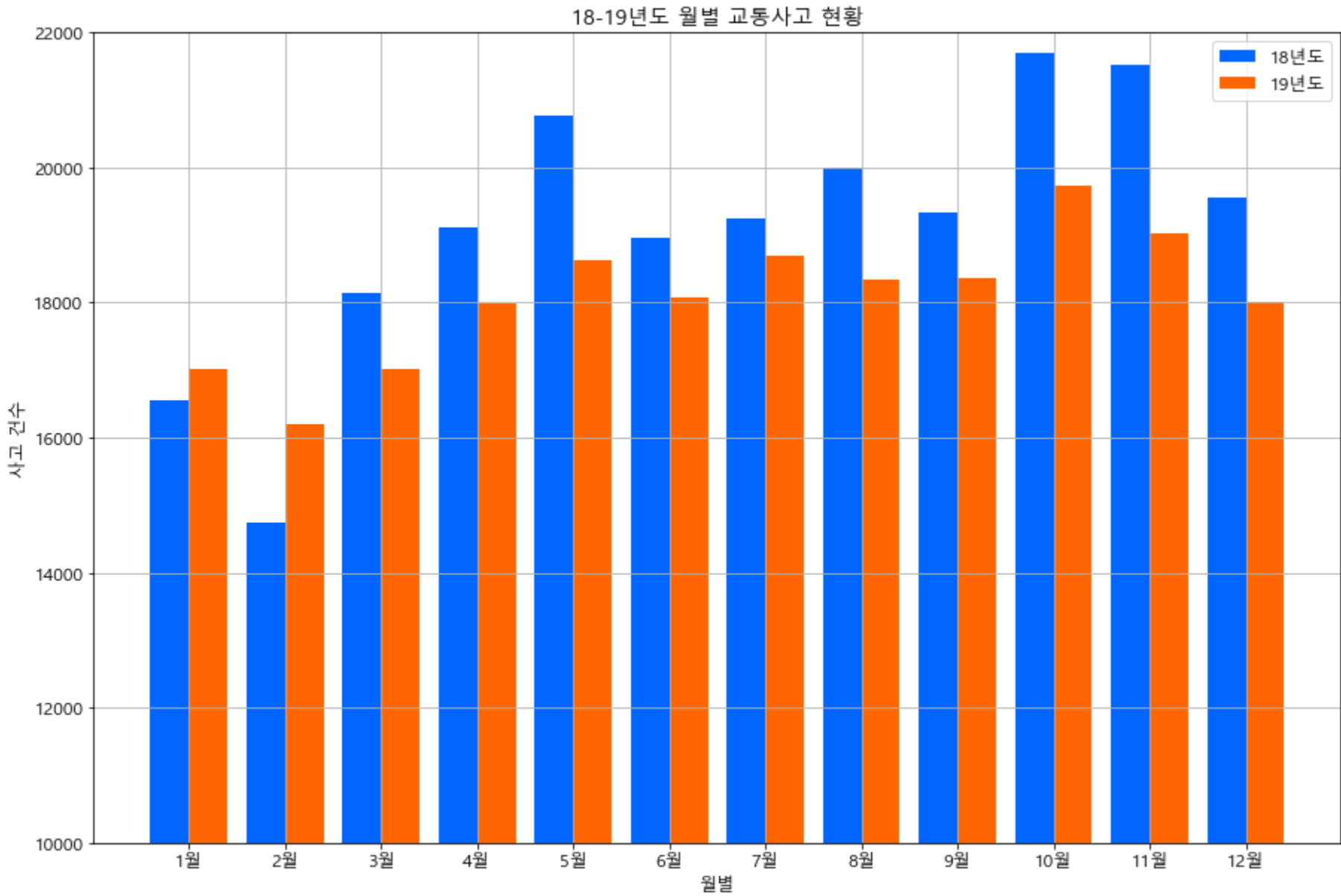
pyplot.bar(mon-0.2, break18_num, label='18년도', width = 0.4 ,color='#0066ff')
pyplot.bar(mon+0.2, break19_num, label='19년도', width = 0.4, color='#ff6600')
pyplot.xticks(mon, label)

pyplot.grid()
pyplot.legend()
pyplot.xlabel("월별")
pyplot.ylabel("사고 건수")
pyplot.title("18-19년도 월별 교통사고 현황")
pyplot.ylim(10000,22000)

pyplot.show()
pyplot.close()
```

[ 0 1 2 3 4 5 6 7 8 9 10 11]

['1월', '2월', '3월', '4월', '5월', '6월', '7월', '8월', '9월', '10월', '11월', '12월']



In [83]:

```
import numpy
from matplotlib import pyplot
from sample import label

mon = numpy.arange(len(label))
print(mon)

pyplot.rcParams["font.family"] = "Malgun Gothic"
pyplot.rcParams["font.size"] = 12
pyplot.rcParams["figure.figsize"] = (15,10)

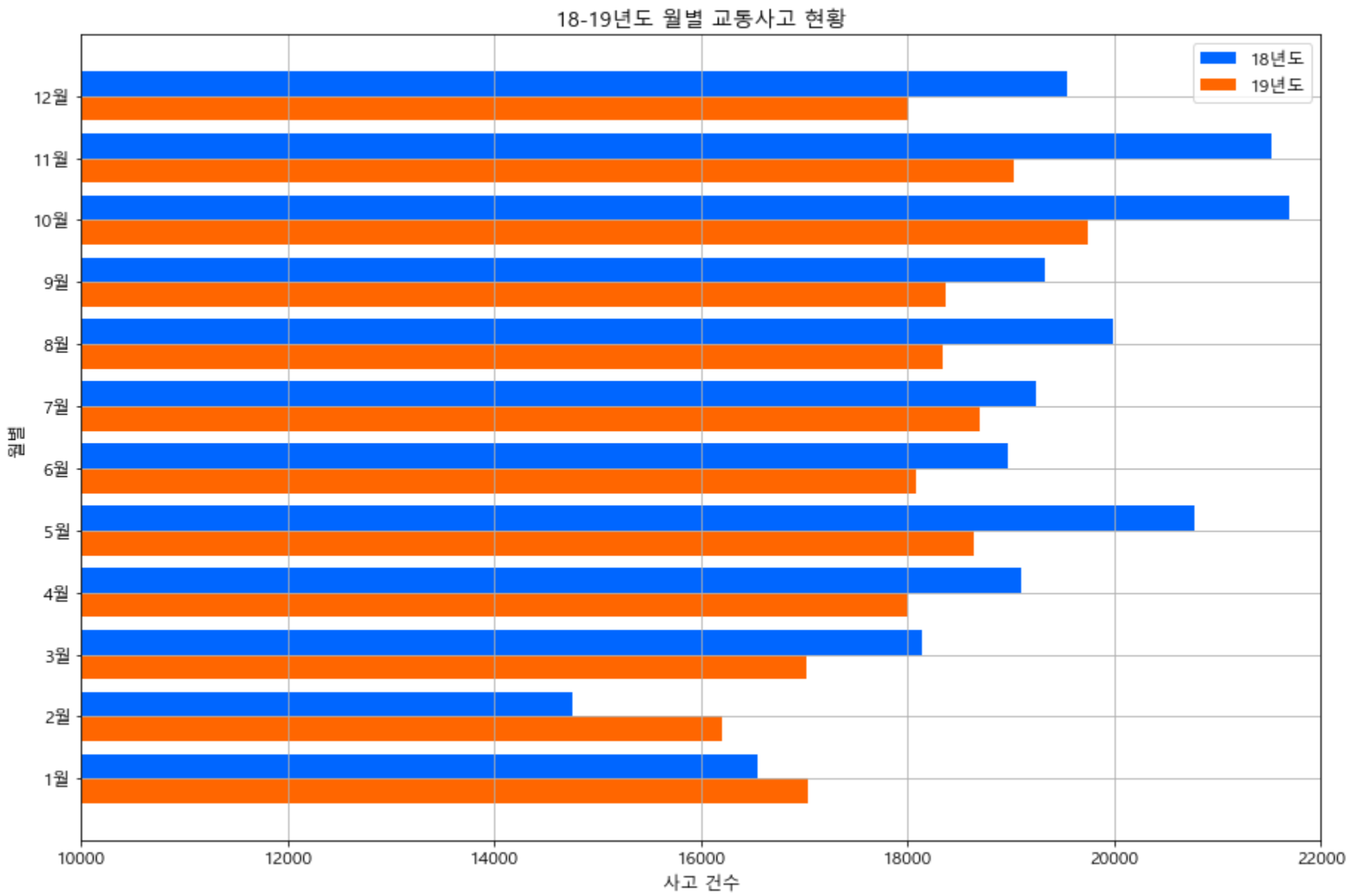
pyplot.figure()

pyplot.barh(mon+0.2, break18_num, label='18년도', height = 0.4 ,color='#0066ff')
pyplot.barh(mon-0.2, break19_num, label='19년도', height = 0.4, color='#ff6600')
pyplot.yticks(mon, label)

pyplot.grid()
pyplot.legend()
pyplot.ylabel("월별")
pyplot.xlabel("사고 건수")
pyplot.title("18-19년도 월별 교통사고 현황")
pyplot.xlim(10000,22000)

pyplot.show()
pyplot.close()
```

[ 0 1 2 3 4 5 6 7 8 9 10 11]



In [ ]: