pandas

Filter DF:

```
filterdf = df [df ['col'] == value ]
```

New Column from Old:

```
df['newcol'] = df['oldcol'] *Expressions
>>> `df['partial year'] = df['year'] + (df['week']/ 52)`
```

If-then Column:

```
df.loc[df.AAA >= 5, "BBB"] = -1
```

```
OUT >>>

    AAA  BBB  CCC
0     4   10  100
1     5   -1   50
2     6   -1  -30
3     7   -1  -50
```

Sort By

```
df.sort_values(by=("Labs", "II"), ascending=False)
```

```
Out[99]:
                     Exams        Labs
                    I   II       I   II
Student Course
Violet   Sci       78   81      81   81
         Math      77   79      81   80
         Comp      76   77      78   79
Quinn    Sci       75   78      78   78
         Math      74   76      78   77
         Comp      73   74      75   76
Ada      Sci       72   75      75   75
         Math      71   73      75   74
         Comp      70   71      72   73
```