Selecting Columns of a Dataframe

Description - Print out the columns 'month', 'day', 'temp', 'area' from the dataframe 'df'.

In [1]:
```
import pandas as pd
df = pd.read_csv('https://cdn.upgrad.com/uploads/production/b3467ba4-4e13-44e9-8087-4d7e94cc7586/forestfires.csv')
df_2 = df[['month', 'day' , 'temp' , 'area']]
print(df_2.head(20))
```

```
   month  day  temp  area
0    mar  fri   8.2   0.0
1    oct  tue  18.0   0.0
2    oct  sat  14.6   0.0
3    mar  fri   8.3   0.0
4    mar  sun  11.4   0.0
5    aug  sun  22.2   0.0
6    aug  mon  24.1   0.0
7    aug  mon   8.0   0.0
8    sep  tue  13.1   0.0
9    sep  sat  22.8   0.0
10   sep  sat  17.8   0.0
11   sep  sat  19.3   0.0
12   aug  fri  17.0   0.0
13   sep  mon  21.3   0.0
14   sep  wed  26.4   0.0
15   sep  fri  22.9   0.0
16   mar  sat  15.1   0.0
17   oct  mon  16.7   0.0
18   mar  wed  15.9   0.0
19   apr  sat   9.3   0.0
```

Indexing Dataframes

Description Print only the even numbers of rows of the dataframe 'df'.

Note: Don't include the row indexed zero.

In [2]:

```
import pandas as pd
df = pd.read_csv('https://cdn.upgrad.com/uploads/production/b3467ba4-4e13-44e9-8087-4d7e94cc7586/forestfires.csv')
df_2 = df[2::2]
print(df_2.head(20))
```

```
    X  Y month  day  FFMC    DMC     DC   ISI  temp  RH  wind  rain  area
2   7  4   oct  sat  90.6   43.7  686.9   6.7  14.6  33   1.3   0.0   0.0
4   8  6   mar  sun  89.3   51.3  102.2   9.6  11.4  99   1.8   0.0   0.0
6   8  6   aug  mon  92.3   88.9  495.6   8.5  24.1  27   3.1   0.0   0.0
8   8  6   sep  tue  91.0  129.5  692.6   7.0  13.1  63   5.4   0.0   0.0
10  7  5   sep  sat  92.5   88.0  698.6   7.1  17.8  51   7.2   0.0   0.0
12  6  5   aug  fri  63.5   70.8  665.3   0.8  17.0  72   6.7   0.0   0.0
14  6  5   sep  wed  92.9  133.3  699.6   9.2  26.4  21   4.5   0.0   0.0
16  5  5   mar  sat  91.7   35.8   80.8   7.8  15.1  27   5.4   0.0   0.0
18  6  4   mar  wed  89.2   27.9   70.8   6.3  15.9  35   4.0   0.0   0.0
20  6  4   sep  tue  91.0  129.5  692.6   7.0  18.3  40   2.7   0.0   0.0
22  7  4   jun  sun  94.3   96.3  200.0  56.1  21.0  44   4.5   0.0   0.0
24  7  4   aug  sat  93.5  139.4  594.2  20.3  23.7  32   5.8   0.0   0.0
26  7  4   sep  fri  92.4  117.9  668.0  12.2  19.0  34   5.8   0.0   0.0
28  6  3   sep  sat  93.4  145.4  721.4   8.1  30.2  24   2.7   0.0   0.0
30  6  3   sep  fri  94.3   85.1  692.3  15.9  25.4  24   3.6   0.0   0.0
32  6  3   sep  fri  88.6   69.7  706.8   5.8  20.6  37   1.8   0.0   0.0
34  6  3   sep  mon  91.8   78.5  724.3   9.2  21.2  32   2.7   0.0   0.0
36  6  3   oct  tue  90.6   35.4  669.1   6.7  21.7  24   4.5   0.0   0.0
38  7  3   oct  sat  90.6   43.7  686.9   6.7  17.8  27   4.0   0.0   0.0
40  4  4   jul  tue  79.5   60.6  366.7   1.5  23.3  37   3.1   0.0   0.0
```

Which of the code(s) below will fetch the row containing the following data?

[S. No.: 3, Name: Vikas, Subject: Mathematics, Percentage: 84]

Answer:-

df.loc[[3], ["Name", "Subject", "Percentage"]]

**df.iloc[[2], [0, 1, 4]] **

Applying Conditions on Dataframes

Description - Print all the columns and the rows where 'area' is greater than 0, 'wind' is greater than 1 and the 'temp' is greater than 15.

In [3]:

```
import pandas as pd
df = pd.read_csv('https://cdn.upgrad.com/uploads/production/b3467ba4-4e13-44e9-8087-4d7e94cc7586/forestfires.csv')
df_2 = df[(df["area"]>0) & (df["wind"]>1) & (df["temp"]>15)]
print(df_2.head(20))
```

```
     X  Y month  day  FFMC    DMC     DC   ISI  temp  RH  wind  rain  area
138  9  9   jul  tue  85.8   48.3  313.4   3.9  18.0  42   2.7   0.0  0.36
139  1  4   sep  tue  91.0  129.5  692.6   7.0  21.7  38   2.2   0.0  0.43
140  2  5   sep  mon  90.9  126.5  686.5   7.0  21.9  39   1.8   0.0  0.47
141  1  2   aug  wed  95.5   99.9  513.3  13.2  23.3  31   4.5   0.0  0.55
142  8  6   aug  fri  90.1  108.0  529.8  12.5  21.2  51   8.9   0.0  0.61
143  1  2   jul  sat  90.0   51.3  296.3   8.7  16.6  53   5.4   0.0  0.71
144  2  5   aug  wed  95.5   99.9  513.3  13.2  23.8  32   5.4   0.0  0.77
145  6  5   aug  thu  95.2  131.7  578.8  10.4  27.4  22   4.0   0.0  0.90
147  8  3   sep  tue  84.4   73.4  671.9   3.2  24.2  28   3.6   0.0  0.96
148  2  2   aug  tue  94.8  108.3  647.1  17.0  17.4  43   6.7   0.0  1.07
149  8  6   sep  thu  93.7   80.9  685.2  17.9  23.7  25   4.5   0.0  1.12
150  6  5   jun  fri  92.5   56.4  433.3   7.1  23.2  39   5.4   0.0  1.19
151  9  9   jul  sun  90.1   68.6  355.2   7.2  24.8  29   2.2   0.0  1.36
152  3  4   jul  sat  90.1   51.2  424.1   6.2  24.6  43   1.8   0.0  1.43
153  5  4   sep  fri  94.3   85.1  692.3  15.9  20.1  47   4.9   0.0  1.46
154  1  5   sep  sat  93.4  145.4  721.4   8.1  29.6  27   2.7   0.0  1.46
155  7  4   aug  sun  94.8  108.3  647.1  17.0  16.4  47   1.3   0.0  1.56
156  2  4   sep  sat  93.4  145.4  721.4   8.1  28.6  27   2.2   0.0  1.61
157  2  2   aug  wed  92.1  111.2  654.1   9.6  18.4  45   3.6   0.0  1.63
158  2  4   aug  wed  92.1  111.2  654.1   9.6  20.5  35   4.0   0.0  1.64
```