Ex4

April 24, 2020

1 Exercise 4

1.1 Draw Bar Chart for all of the categorical variables

[1]:
```
import matplotlib.pyplot as plt
import pandas as pd
import seaborn as sb
from math import sqrt
import numpy as np
from os import system
```

[2]:
```
adult = pd.read_csv('/home/hakim/Documents/semester 8/DM/HW_2/adult.csv')
```

1.1.1 divide categorical values

First we divide categorical values and save them in cat_colls.

[3]:
```
colls = adult.columns

cat_colls = []
for c in colls:
    try:
        float(df[c][0])
    except:
        #print(c, ' is a categorical value')
        cat_colls.append(str(c))
```

[4]:
```
coll_count = int(len(cat_colls))
row_number = (coll_count) / 1

if row_number % 1 > 0: row_number = int(row_number) + 1
```

[12]:
```
plt.figure(figsize=(15,200), dpi=80)
colores = ['b','g', 'r', 'c', 'm', 'y', 'k']
i = 0
for c in cat_colls:
```

```
    count = adult[c].value_counts()
    category = count.index
    plt.subplot(row_number,1,i+1)
    plt.bar(category, count, color=colores[i % 7])
    plt.xlabel(c)
    plt.ylabel('Counts')
    plt.xticks(rotation='vertical')
    plt.title(str(c))
    i += 1
plt.show()
```