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20181CSE0621
7 - CSE - 10
DV Batch - 1

In [1]:
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
%matplotlib inline
import seaborn as sns
import warnings; warnings.simplefilter('ignore')
plt.style.use(['dark_background','seaborn-pastel','ggplot'])
```

In [3]:
```
df = pd.read_csv(r'company_sales_data.csv')
df.head(3)
```

Out[3]:

	month_number	facecream	facewash	toothpaste	bathingsoap	shampoo	moisturizer	total_units	total_profit
0	1	2500	1500	5200	9200	1200	1500	21100	211000
1	2	2630	1200	5100	6100	2100	1200	18330	183300
2	3	2140	1340	4550	9550	3550	1340	22470	224700

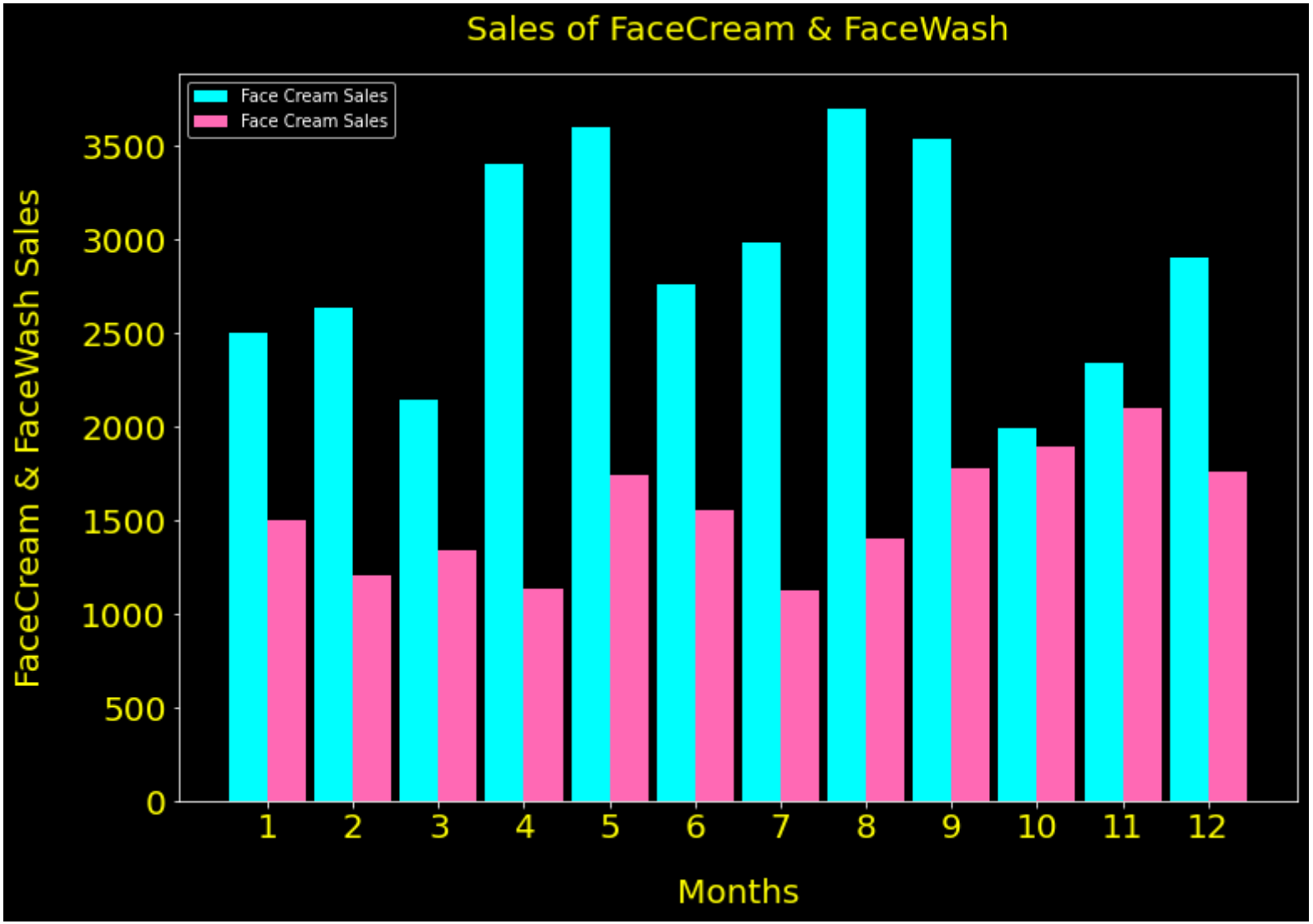
Part - B
Question.1-A

In [51]:

```
facecream = df['facecream']
facewash = df['facewash']
months  = df ['month_number'].tolist()

with plt.style.context('dark_background'):
  width = 0.45
  x = np.arange(len(df['month_number']))
  plt.figure(figsize=(12, 8))
  plt.title('Sales of FaceCream & FaceWash',size=20,color='yellow',pad=20)
  plt.bar([(x-width/2) for x in months], facecream, width, label='Face Cream Sales',linewidth=3,color='cyan')
  plt.bar([(x+width/2) for x in months], facewash, width, label='Face Cream Sales',linewidth=3,color='hotpink')
  plt.xlabel('Months',size=20,color='yellow',labelpad=20)
  plt.xticks(size=20,color='yellow')
  plt.ylabel('FaceCream & FaceWash Sales',labelpad=20,size=20,color='yellow')
  plt.yticks(size=20,color='yellow')
  plt.legend(loc='upper left')
  plt.xticks(months)

```



Part - B
Question.1-B

In [23]:

```
soaps = list(df['bathingsoap'])
months=['Jan','Feb','Mar','Apr','May','Jun','Jul','Aug','Sep','Oct','Nov','Dec']
with plt.style.context('dark_background'):
  plt.figure(figsize=(10,6))
  plt.bar(df.month_number,df.bathingsoap,color='cyan')
  plt.xlabel("Months",fontsize=20) ; plt.xticks(color='yellow',size=15)
  plt.ylabel("Bathing Soaps Sold",fontsize=20)
  plt.yticks(color='yellow',size=15)
  plt.title("Bathing soap Sale Data",fontsize=30)
  plt.xticks([i for i in range(1,13)],labels=months)
  plt.show()
#Saving to hardrive
  plt.savefig("result.jpg")
```