Business Analytics Programming Fall 2019, Midterm # 2 - Answers

Version A

1. **What is the value of x?**

```
    df2=df[['text','b']]

```

or

```
    df2=dt[['text','b']]

```

or

```
    df2=df.loc[:,['text','b']]

```

or

```
    df2=dt.loc[:,['text','b']]

```

2. **30**
3. **30**
4.

```
    df=json_normalize(A,'B')

```

5. $[0,1,2,4.2,4]$
6.

```
    df.groupby('Candy')['Price'].sum()

```

7.

```
    df.loc[(df.Candy=='dove') & (df.Sales<160) & (df.Sales
  >110),'Price'] = 15

```

or

```
    dft=df.loc[ (df.Sales<160) & (df.Sales>110)]
    dft.loc[dft.Candy=='dove','Price']=15

```

8. **3**
9. **6**
10. **60**

11. **error**
12. **7**
13. **C**
14. **E**

Version B

1. **E**
2. **B**
3. **error**
4. **error**
5. **What is the value of x?**

```
    df2=df[['text','a']]

```

or

```
    df2=dt[['text','a']]

```

or

```
    df2=df.loc[:,['text','a']]

```

or

```
    df2=dt.loc[:,['text','a']]

```

6. **1**
7. **5**
8.
```
    df=json_normalize(D,'C')

```

9. $[0, 1, 5.5, 3, 4]$
10.
```
    df.groupby('Candy')['Price'].mean()

```

11.
```
    df.loc[(df.Candy=='twix') & (df.Sales<140) & (df.Sales
  >90),'Price'] = 8

```

or

```
    dft=df.loc[ (df.Sales<140) & (df.Sales>90)]
    dft.loc[dft.Candy=='twix','Price']=8

```

12. **11**
13. **14**
14. **80**

Version C

1. **What is the value of x?**

```
    df2=df[['text','b']]

```

or

```
    df2=dt[['text','b']]

```

or

```
    df2=df.loc[:,['text','b']]

```

or

```
    df2=dt.loc[:,['text','b']]

```

2. **2**
3. **4**
4.
```
    df=json_normalize(B,'a')

```

5. $[0, 2.5, 2, 3, 4]$
6.
```
    df.groupby('Candy')['Price'].max()

```

7.
```
    df.loc[(df.Candy=='snickers') & (df.Sales<120) & (df.
  Sales>70),'Price'] = 10

```

or

```
    dft=df.loc[ (df.Sales<120) & (df.Sales>70)]
    dft.loc[dft.Candy=='snickers','Price']=10
```

8. **4**
9. **18**
10. **120**
11. **error**
12. **error**
13. **C**
14. **E**

Version D

1. **E**
2. **B**
3. **error**
4. **error**
5. **What is the value of x?**

```
    df2=df[['text','a']]
```

or

```
    df2=dt[['text','a']]
```

or

```
    df2=df.loc[:,['text','a']]
```

or

```
    df2=dt.loc[:,['text','a']]
```

6. **1**
7. **1**
8.

```
    df=json_normalize(C,'D')
```

9. $[2.5, 1, 2, 3, 4]$

10.
```
df.groupby('Candy')['Price'].sum()
```

11.
```
df.loc[(df.Candy=='mounds') & (df.Sales<100) & (df.Sales>50),'Price'] = 5
```

or

```
dft=df.loc[ (df.Sales<100) & (df.Sales>50)]
dft.loc[dft.Candy=='mounds','Price']=5
```

12. **5**

13. **15**

14. **140**