

1) Choose the appropriate command(s) to filter those booking details whose **reservation\_status** are a **No-show**? *1 point*

☐

```
data_hotel_ns = data_hotel.loc[data_hotel.reservation_status = 'No-Show']
```



```
data_hotel_ns = data_hotel[data_hotel.reservation_status == 'No-Show']
```

☐

```
data_hotel_ns = data_hotel.reservation_status.loc[data_hotel.isin(['No-Show'])]
```



```
data_hotel_ns = data_hotel.loc[data_hotel.reservation_status.isin(['No-Show'])]
```

2) From the same data, find how many bookings were **not canceled** in the year **2017**? *1 point*



9064



6231



9046



None of the above



3) From the total bookings that were made in **2017** and **not canceled**, which month had the highest number of repeated guests? *1 point*



July



February



January



None of the above

4) Which of the following commands can be used **1 point** to create a variable **Flag**, and set the values as **Premium** when the **rating** is **equal to or greater than 3.25**, and otherwise as **Regular**?

☐

```
dt_cocoa['Flag'] = ["Premium" if x > 3.25 else "Regular" for x in dt_cocoa['Rating']]
```

☒

```
dt_cocoa['Flag'] = ["Premium" if x >= 3.25 else "Regular" for x in dt_cocoa['Rating']]
```

☒

```
dt_cocoa["Flag"] = np.where(dt_cocoa["Rating"] < 3.25, "Regular", "Premium")
```

☐

None of the above

5) Which instruction can be used to impute the missing values in the column **Review Data** from the dataframe **dt\_cocoa** by grouping the records company – wise? **1 point**

☒

```
dt_cocoa['Review Date'] = dt_cocoa.groupby(['Company'])['Review Date'].apply(lambda x: x.fillna(x.mode().iloc[0]))
```

☐

```
dt_cocoa['Review Date'] = dt_cocoa.groupby(['Company'])['Review Date'].apply(lambda x: x.fillna(x.mean()))
```

☐

```
dt_cocoa['Review Date'] = dt_cocoa.groupby(['Company'])['Review Date'].apply(lambda x: x.fillna(x.mode()))
```

☐

None of the above

6) After checking the data summary, which feature **1 point** requires a data conversion considering the data values held?

☐

Rating

☒

Review Date

☐

Company

☐

None of the above

7) What is the maximum average rating for the cocoa companies based out of **Guatemala**? 1 point

- ☐ 4
- ☐ 3.5
- ☒ 3.42
- ☐ None of the above

8) Which pandas function is used to stack the dataframes vertically? 1 point

- ☐ pd.merge()
- ☒ pd.concat()
- ☐ join()
- ☐ None of the above

Assume a pandas dataframe **df\_weather** which when printed is as shown below:

```
In [38]: df_weather
Out[38]:
```

|   | Direction | Temperature | Windspeed | Humidit |
|---|-----------|-------------|-----------|---------|
| 0 | East      | 49          | 10        | 7       |
| 1 | West      | 54          | 5         | 8       |
| 2 | North     | 35          | 8         | 9       |
| 3 | South     | 42          | 15        | 7       |

9) Of the following set of statements, which of them can be used to extract the column **Direction** as a separate dataframe? 1 point

☒ `df_weather[['Direction']]`

☒ `df_weather.iloc[:,0]`

☐

`df_weather.loc[:,['Direction']]`

☐ None of the above

10) A file **"Students.csv"** contains the attendance and scores of three separate students. This dataset is loaded into a dataframe **df\_study** and a cross table is obtained from the same dataframe which results in the following output

| Subject | Chemistry | Maths | Physics | All   |
|---------|-----------|-------|---------|-------|
| Person  |           |       |         |       |
| Harini  | 90.00     | 94.00 | 83.00   | 89.00 |
| Rekha   | 92.00     | 85.00 | 95.00   | 90.67 |
| Sathi   | 74.00     | 84.00 | 81.00   | 79.67 |
| All     | 85.33     | 87.67 | 86.33   | 86.44 |

Which one of these students' average score across all subjects was the lowest? Which subject has the highest average score across students?

- ☐ Harini, Maths
- ☒ Sathi, Maths
- ☐ Harini, Physics
- ☐ Rekha, Maths