✅ **Congratulations! You passed!**

| Grade | Latest Submission | To pass 75% or |
| received 100% | Grade 100% | higher |

Go to next item

---

1. At your organization, 30% of the customer database is comprised of members who live in the UK. You collect information on all of your clients including their names, addresses, ages, email, order history, and preferred method of payment. What data privacy regulations should you be aware of when handling and analyzing this data?

   `1 / 1 point`

   ○ General Protection and Privacy Regulation (GPPR)

   ⦿ General Data Protection Regulation (GDPR)

   ○ Privacy Guide and Data Regulations (PGDR)

   ○ Regulations of Data Protection Guide (RDPG)

   ✓ **Correct**
   Correct. The GDPR was implemented in 2018 in order to protect the data of residents living in the EU.

2. What acronym is used to describe information such as full names, social security numbers, bank account numbers, email addresses, and drivers license numbers?

   `1 / 1 point`

   PII

   ✓ **Correct**

3. You work for an organization that only has clients located in the northeastern part of the United States. More specifically, they are in New York, New Jersey, Connecticut, and Delaware. Your manager asks you to segment the client database based on pre-determined criteria, and then send the names and addresses of the members of the segment with the largest revenue potential to a vendor located in the Midwest that has been trying to expand its market in the northeast. You find out that the manager has brokered a deal with the vendor for a significant discount in exchange for the information.

   `1 / 1 point`

   What important topic is most likely being breached by completing this action?

   ○ Data Governance

   ⦿ Data Ethics

   ○ Data Mining

   ○ Data Privacy

   ✓ **Correct**
   Correct. This does not appear to violate any major laws, but would most likely fall under an organization's data ethics guidelines. It is also not a good business practice.

4. Someone within your organization asks you to send a file with sensitive information to someone outside of your organization. You double check with a number of parties and the information has been approved to be sent by all stakeholders in the project.

   `1 / 1 point`

   True or false: Encryption is not necessary for this email, because if it was, someone would have told you to do it.

   ○ True

   ⦿ False

   ✓ **Correct**
   Correct. Encryption is incredibly easy to implement and should be used as an added level of security when it comes to sending sensitive information, whether you are instructed to or not.

5. Since you have an understanding of how data-driven decisions can benefit your organization and you have proven that you are a leader in analytics techniques and data visualization, your executive team asks you to think about how to create a data culture. What would NOT be a suggestion you make when formulating a plan to implement a framework to encourage a more data-driven culture?

   `1 / 1 point`

   ○ Encourage members of the organization at all levels to seek cross-training opportunities and ask questions

○ Do a complete overhaul of the organization's analytics and data visualizations platforms

○ Propose that employees in certain functions be given some time to work on side projects that could potentially benefit the company

○ Set up monthly presentations where a different department each month walks an audience through how they solved a problem by using data

✓ **Correct**
Correct. An organization does not need flashy software and applications to successfully build a data culture. While dashboards can get people on board with investing in analytics, it is not necessary to purchase or implement new tools in order to generate buy in.

---

6. You work for a CPG company that released a new product in a limited market approximately six months ago. It is now time to launch the product nationwide and the marketing team in your organization wondered for a while what type of shelf space they should purchase (in-aisle, end cap, standalone display) at retail establishments in order to push sales of the new product. The team ultimately decided on a stand alone display, and is considering placing other complementary products on the display as well to try and increase sales by association. What type of analysis might you recommend for the team to conduct in order to determine which other products should be placed on the display?

`1 / 1 point`

○ Market Segmentation

○ Decision Tree

◉ Market Basket Analysis

○ Monte Carlo Simulation

✓ **Correct**
Correct. Market basket analysis is used to determine what items are commonly grouped together or have a high likelihood of being purchased together.

---

7. A manufacturing facility operates a number of machines, all of which have sensors on them to provide insights into each machines performance. The facility is considering the purchase of additional sensors to add to the machines in order to generate more data. The management team that oversees the facility is sure that the sensors will be valuable because "more data = better solutions".

`1 / 1 point`

True or false: Based on the information above, the organization should purchase and install the new sensors.

○ True

◉ False

✓ **Correct**
Correct. Just because you collect more data, it does not mean your decisions will be any more informed. Understanding why you would collect a dataset and how it will be used before you even implement the changes is key to creating a streamlined data solution.

---

8. One of your direct reports has proven himself to be an Excel wizard, and he creates some thoughtful analyses within the application on a weekly basis. During a review meeting, he mentions he has an interest in learning more about deep analytics techniques and data visualization and asks if there are any opportunities for him to learn more about these topics. What might you recommend to him as a way to learn about and/or improve these skills?

`1 / 1 point`

Select all that apply

☑ Local Python meet-up

✓ **Correct**
Correct. A lot of communities have a pocket of Python power users that meet up on a consistent basis to discuss new projects and how to effectively use built-in libraries. They are informal learning from incredibly passionate users, making it a great way to introduce Python to a new user. There is more than one correct answer.

☐ An online course about Visual Basic for Applications (VBA)

☑ The annual MATLAB & Simulink conference

✓ **Correct**
Correct. Each year companies like MATLAB offer a conference where users can sit in workshops or hear lectures given by industry professionals to better understand new applications for the product. There is typically a cost involved, but it is often a worthwhile investment for an organization to send a candidate to an event like this. There is more than one correct answer.

☑ Local Tableau User Group

✓ **Correct**
Correct. Tableau has deep roots in its communities, and the company's "TUGs" have been a great way to

9. Your once-small organization is growing at a breakneck pace. Your client list has increased exponentially meaning you have experienced an influx in information between storing the client database, housing purchase information, and receiving orders. You have expanded your operations and increased the number of machines on the floor in order to meet demand, thereby increasing the data coming through from your sensors. With all of this information floating around, what position might you hire on the back end to help manage the data?

1 / 1 point

- ⦿ Security Analyst
- ◯ Director of Analytics
- ◯ Data Analyst
- ◯ Project Manager

✓ **Correct**
Correct. Security analysts have the ability to manage and secure the data, making these positions a good first step to creating a more secure environment.