

Your grade: 100%

Your latest: **100%** • Your highest: **100%** • To pass you need at least 80%. We keep your highest score.

Next item →

1. Which command is used to activate a Conda environment in your terminal?

1 / 1 point

- ☐ activate conda [environment_name]
- ☐ conda start [environment_name]
- ☒ conda activate [environment_name]
- ☐ start conda [environment_name]

☒ **Correct**
Correct! This is the standard command to activate a Conda environment.

2. What differentiates machine learning from classical programming?

1 / 1 point

- ☐ Machine learning models are always more accurate than classical programming
- ☒ Machine learning models learn from data, while classical programming relies on explicit instructions
- ☐ Machine learning models do not need any data, while classical programming requires large datasets
- ☐ Machine learning is only used in academic research, while classical programming is used in commercial applications

☒ **Correct**
Correct! Machine learning models use data to improve their performance, whereas classical programming relies on predefined rules.

3. Which application is an example of artificial intelligence in the present day?

1 / 1 point

- ☐ Manual data entry
- ☐ Static content websites
- ☒ Personalized recommendations on streaming services
- ☐ Traditional programming loops

☒ **Correct**
Correct! Personalized recommendations on streaming services use AI to suggest content based on user preferences.

4. Select the activation functions that are non-linear and commonly used in neural networks.

1 / 1 point

- ☐ Linear Function
- ☒ Sigmoid

☒ **Correct**
Correct! The Sigmoid function is non-linear and was historically used in neural networks.

- ☒ ReLu (Rectified Linear Unit)

☒ **Correct**
Correct! ReLu is non-linear and commonly used in hidden layers.

- ☒ Leaky ReLu

☒ **Correct**
Correct! Leaky ReLu is a variation of ReLu that aims to solve the dying ReLu problem.

- ☐ Step Function
- ☒ Hyperbolic Tangent (Tanh)

☒ **Correct**
Correct! Tanh is a non-linear activation function and is used in neural networks.

5. What is the primary reason for the popularity and improvement of deep learning in recent years?

1 / 1 point

- ☐ Improvement in classical machine learning algorithms
- ☐ Availability of large datasets
- ☐ Reduction in the cost of cloud storage
- ☒ Advances in computational power, especially GPUs

☒ **Correct**
Correct! Advances in computational power, particularly GPUs, have significantly contributed to the rise of deep learning.

