

Data Sprint - Expert

* Required

Section

1

Whats your name ? *

2

What's your email ? *

3

Phone number *

Quiz

Quiz starts here.

4

If a dataset has the same mean, median, and mode, what does it indicate? (1 Point)

- ☐ It is always symmetric
- ☐ It must be multimodal
- ☐ It has outliers
- ☐ It is always negatively skewed

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The mode of {3, 3, 6, 9, 9, 9, 12, 12} is: (1 Point)

- ☐ 3
- ☐ 6
- ☐ 9
- ☐ 12

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Which measure is most affected by outliers? (1 Point)

- ☐ Range
- ☐ Mode
- ☐ Median
- ☐ Mean

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What is the probability of getting a head when flipping a fair coin twice? (1 Point)

- ☐ 20%
- ☐ 50%
- ☐ 75%
- ☐ 75% or 50% depending on the flips

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A fair die is rolled. What is the probability of rolling a number greater than 4? (1 Point)

- ☐ 1/6
- ☐ 1/3
- ☐ 1/2
- ☐ 2/3

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If a dataset has 5 numbers and you add a new number, what happens to the mean? (1 Point)

- ☐ Always increases
- ☐ Always decreases
- ☐ Always remains the same
- ☐ Can increase, decrease, or stay the same

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If an event has a probability of 1, what does it mean? (1 Point)

- ☐ It will never happen
- ☐ It is certain to happen
- ☐ It has a 50% chance
- ☐ It depends on another event

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If the range of a dataset is 0, what does it indicate? (1 Point)

- ☐ All values are the same
- ☐ The dataset is symmetric
- ☐ The dataset has outliers
- ☐ The mean is also 0

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Which of the following is NOT a type of machine learning? (1 Point)

- ☐ Supervised Learning
- ☐ Reinforcement Learning
- ☐ Deep Learning
- ☐ Unsupervised Learning

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What is the first step in any data science project? (1 Point)

- ☐ Model building
- ☐ Data visualization
- ☐ Understanding the business problem and collecting data
- ☐ Deploying the model

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What is the main difference between supervised and unsupervised learning? (1 Point)

- ☐ Supervised learning requires labeled data, unsupervised does not
- ☐ Supervised learning is faster than unsupervised
- ☐ Unsupervised learning has a teacher, supervised does not
- ☐ Supervised learning is always more accurate

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Which of these can be used for both classification and regression? (1 Point)

- ☐ Decision Tree
- ☐ Logistic Regression
- ☐ K-Means Clustering
- ☐ Naïve Bayes

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A model that perfectly fits the training data but performs poorly on test data is called (1 Point)

- ☐ Underfitted
- ☐ Overfitted
- ☐ Optimized
- ☐ Regularized

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Which algorithm is most affected by outliers? (1 Point)

- ☐ K-Means Clustering
- ☐ Decision Trees
- ☐ Random Forest
- ☐ Naïve Bayes

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ETL . (1 Point)

- ☐ Extract, Transfer, Load
- ☐ Extract, Transform, Load
- ☐ Encode, Transfer, Learn
- ☐ Evaluate, Train, Launch

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GPU (1 Point)

- ☐ General Processing Unit
- ☐ Graphical Processing Utility
- ☐ Graphics Processing Unit
- ☐ Global Processing Unit

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If the mean of a dataset is 50 and the sum of all values is 500, how many values are in the dataset?
(1 Point)

- ☐ 5
- ☐ 10
- ☐ 50
- ☐ 100

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What is the best way to handle missing values in numerical data? (1 Point)

- ☐ Drop the rows with missing values
- ☐ Replace with the mean, median, or mode
- ☐ Replace with 0
- ☐ Ignore missing values

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What happens if you increase the number of features in a model without increasing training data?
(1 Point)

- ☐ Model improves
- ☐ Model becomes more interpretable
- ☐ Model overfits
- ☐ Model remains unaffected

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In KNN, what does "K" represent? (1 Point)

- ☐ The number of features
- ☐ The number of neighbors considered for classification
- ☐ The number of clusters
- ☐ The number of trees in the model

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Which of the following is NOT a characteristic of Artificial Intelligence? (1 Point)

- ☐ Learning from data
- ☐ Reasoning and problem-solving
- ☐ Always making accurate predictions
- ☐ Ability to adapt to new situations

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In reinforcement learning, what does the "reward" represent? (1 Point)

- ☐ The penalty for a wrong action
- ☐ The total time taken by the agent
- ☐ The feedback that guides learning
- ☐ The final output of the model

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Which of these is NOT a type of AI? (1 Point)

- ☐ Reactive AI
- ☐ Limited Memory AI
- ☐ Supervised AI
- ☐ Self-aware AI

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What is the main advantage of using batch normalization (1 Point)

- ☐ Prevents overfitting
- ☐ Speeds up training and stabilizes learning
- ☐ Removes the need for activation functions
- ☐ Increases model complexity

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What is the main purpose of an autoencoder (1 Point)

- ☐ Classification of images
- ☐ Generating synthetic data
- ☐ Feature extraction and dimensionality reduction
- ☐ Predicting future time series values

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What is the primary advantage of feature scaling? (1 Point)

- ☐ Reduces overfitting
- ☐ Improves interpretability of data
- ☐ Ensures models perform optimally
- ☐ Prevents missing values

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What does PCA (Principal Component Analysis) do? (1 Point)

- ☐ Increases dataset dimensions
- ☐ Selects important features
- ☐ Reduces dataset dimensions while preserving variance
- ☐ Removes outliers

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What is the key advantage of Random Forest over Decision Trees? (1 Point)

- ☐ Random Forest is faster
- ☐ Random Forest prevents overfitting
- ☐ Random Forest requires less data
- ☐ Random Forest does not require feature selection

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What is the biggest challenge in deploying ML models in real-world applications? (1 Point)

- ☐ Lack of data availability
- ☐ Scaling and model monitoring
- ☐ Too many models to choose from
- ☐ Feature selection issues

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Why is data ethics important in AI? (1 Point)

- ☐ To avoid lawsuits
- ☐ To ensure fairness and prevent biases
- ☐ To make AI more complex
- ☐ To follow unnecessary regulations

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A dataset has 1000 samples, 80% for training, 20% for testing. How many samples are in the test set? (1 Point)

- ☐ 100
- ☐ 500
- ☐ 200
- ☐ 800

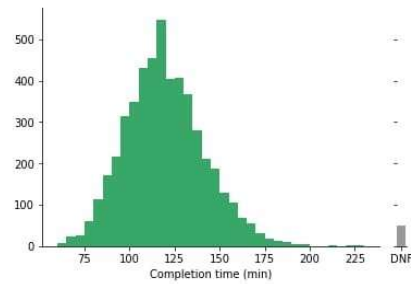
35

If the correlation between two features is 0.9, what does this mean (1 Point)

- ☐ Strong positive correlation
- ☐ Strong negative correlation
- ☐ No correlation
- ☐ Nonlinear relationship

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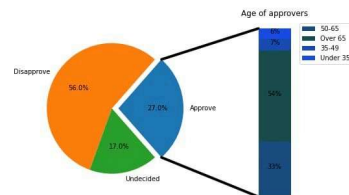
Is this chart bell shaped ? (1 Point)



- ☐ Yes
- ☐ No
- ☐ Right skewed
- ☐ Left skewed

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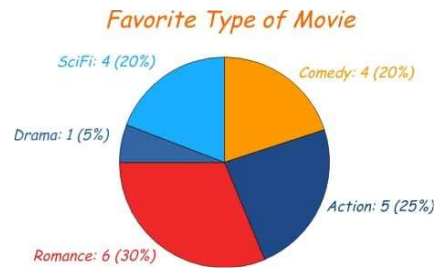
The man whose age is 30 is approved and come in 54% of population who approved. (1 Point)



- ☐ Yes
- ☐ No
- ☐ May be yes
- ☐ none

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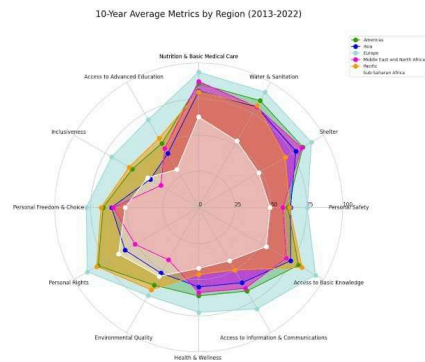
Which type of movie is liked most by people?
(1 Point)



- ☐ Scifi
- ☐ Drama
- ☐ Comedy
- ☐ Action

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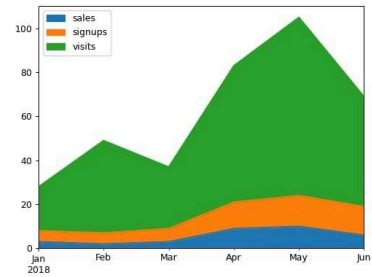
Which metrics is mostly pulled towards itself of every region?
(1 Point)



- ☐ Shelter
- ☐ Personal rights
- ☐ Environmental Quality
- ☐ can't say

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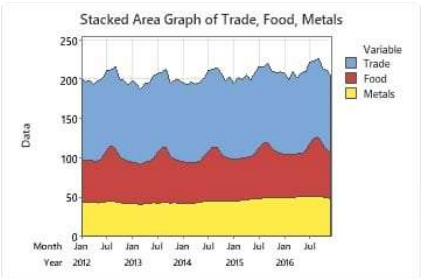
Which part covered very less area? (1 Point)



- ☐ Sales
- ☐ Signup
- ☐ Visits
- ☐ none of the above

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What is average range of trade? (1 Point)



- ☐ near to 200
- ☐ near to 100
- ☐ near to 50
- ☐ near to 150

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What does "AI Bias" mean in machine learning? (1 Point)

- ☐ AI performing better than humans
- ☐ AI making decisions based on historical patterns
- ☐ AI making unpredictable decisions
- ☐ AI being 100% fair

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What is the primary risk of AI making decisions without human oversight? (1 Point)

- ☐ Increased efficiency
- ☐ Reduced bias
- ☐ Lack of accountability
- ☐ Faster processing

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