Weekly Test @ 7:30 PM

Total points 36/50 ?

✓ What is the correct syntax to declare a variable in Python? *   1/1

☐ a) int a = 10

☐ b) var a = 10

☑ c) a = 10   ✓

☐ d) declare a = 10

✓ 2. What is the output of type(10.5)? *   1/1

○ a) int

◉ b) float   ✓

○ c) double

○ d) decimal

✓ 3. Which data type is mutable in Python? *   1/1

○ a) Tuple

◉ b) List   ✓

○ c) String

○ d) Integer

✕   4. What will bool([]) return? *   0/1

○ a) True   ✕

○ b) False

○ c) None

○ d) Error

Correct answer

◉ b) False

✕   5. What will type({}) return in Python? *   0/1

○ a) dict

◉ b) set   ✕

○ c) list

○ d) None

Correct answer

◉ a) dict

✗ 6. What will be the output of print(2 == 2.0)? *   0/1

○ a) True

⦿ b) False   ✗

○ c) Error

○ d) None

Correct answer

⦿ a) True

✓ 7. How many times will the loop run? *   1/1
python

```
for i in range(1, 5):

    print(i)
```

○ a) 3

⦿ b) 4   ✓

○ c) 5

○ d) 6

○ Option 5

✓ 8. Which keyword is used to exit a loop in Python? *   1/1

○ a) exit

○ b) continue

◉ c) break   ✓

○ d) stop

✗ 9. What is the output of print(3 > 2 > 1)? *   0/1

○ a) True

◉ b) False   ✗

○ c) Error

○ d) None

Correct answer

◉ a) True

✓ 10. What is the difference between continue and break in a loop? *   1/1

○ a) continue stops the loop, break skips an iteration

◉ b) break stops the loop, continue skips an iteration   ✓

○ c) Both do the same

○ d) None of the above

✓ 11. What will len("Python") return? *   1/1

○ a) 5

◉ b) 6   ✓

○ c) 7

○ d) Error

✓ 12. How do you import a module in Python? *   1/1

◉ a) import module_name   ✓

○ b) include module_name

○ c) load module_name

○ d) require module_name

✓ 13. What is the default return type of a function that does not return   *1/1
anything explicitly?

◉ a) NoneType   ✓

○ b) int

○ c) bool

○ d) str

✓ 14. What is the output of print(type(lambda x: x))? *   1/1

○ a) function

○ b) lambda

○ c) None

◉ d) <class 'function'>   ✓

✓ 15. How do you define a function in Python? *   1/1

◉ a) def function_name():   ✓

○ b) function function_name():

○ c) define function_name():

○ d) fn function_name():

✓ 16. Which library is used for handling data in tabular format? *   1/1

○ a) NumPy

◉ b) Pandas   ✓

○ c) Matplotlib

○ d) Seaborn

✓ 17. What function is used to read a CSV file in Pandas? *   1/1

○ a) pd.load_csv()

◉ b) pd.read_csv()   ✓

○ c) pd.open_csv()

○ d) pd.readfile()

✓ 18. Which method displays the first few rows of a DataFrame? *   1/1

○ a) df.start()

○ b) df.first()

◉ c) df.head()   ✓

○ d) df.show()

✗ 19. What does df.shape return? *   ⋯/1

○ a) Number of rows

○ b) Number of columns

◉ c) Tuple (rows, columns)   ✗

○ d) None

No correct answers

✓ 20. How can you check for missing values in a Pandas DataFrame? *   1/1

◉ a) df.isnull()   ✓

○ b) df.hasnull()

○ c) df.missing()

○ d) df.checknull()

✓ 21. What does df.dropna() do? *   1/1

◉ a) Removes missing values   ✓

○ b) Fills missing values

○ c) Replaces missing values

○ d) None of the above

✓ 22. Which method is used to fill missing values? *   1/1

◉ a) df.fillna()   ✓

○ b) df.replace()

○ c) df.nullfill()

○ d) df.emptyfill()

✓　23.　What is one-hot encoding used for? *　　　　　1/1

○　a) Converting categorical data into numerical format　　✓

○　b) Normalizing data

○　c) Handling missing values

○　d) Feature scaling

✗　24.　What is PCA used for? *　　　　　　　　　0/1

○　a) Handling missing values

○　b) Reducing dimensionality

○　c) Feature encoding

⦿　d) Data visualization　　　　　　　　　　✗

Correct answer

⦿　b) Reducing dimensionality

✗　25.　Which method is commonly used to detect outliers? *　　0/1

⦿　a) Mean　　　　　　　　　　　　　　✗

○　b) Median

○　c) Interquartile Range (IQR)

○　d) Variance

Correct answer

⦿　c) Interquartile Range (IQR)

✓ 26. What is the purpose of a Box Plot? *   1/1

⦿ a) Identifying outliers   ✓

◯ b) Checking correlation

◯ c) Filling missing values

◯ d) Encoding categorical variables

✓ 27. Which library is used for data visualization in Python? *   1/1

◯ a) NumPy

◯ b) Pandas

⦿ c) Matplotlib   ✓

◯ d) Sklearn

✓ 28. Which function is used to create a histogram in Matplotlib? *   1/1

⦿ a) plt.hist()   ✓

◯ b) plt.bar()

◯ c) plt.scatter()

◯ d) plt.plot()

✗ 29. What argument in plt.plot() is used to define the color of a line? *   0/1

  ⦿ a) c   ✗

  ○ b) color

  ○ c) col

  ○ d) clr

Correct answer

  ⦿ b) color

✓ 30. Which function in Seaborn is used to create a heatmap? *   1/1

  ○ a) sns.heatplot()

  ⦿ b) sns.heatmap()   ✓

  ○ c) sns.corrplot()

  ○ d) sns.mapplot()

✓ 31. Which function is used to generate a box plot in Seaborn? *   1/1

  ⦿ a) sns.boxplot()   ✓

  ○ b) sns.scatterplot()

  ○ c) sns.barplot()

  ○ d) sns.histplot()

✓ 32. How do you filter rows where the column age is greater than 30? *   1/1

    ● a) df[df.age > 30]   ✓

    ○ b) df.filter(age > 30)

    ○ c) df.select(age > 30)

    ○ d) df.age > 30

✓ 33. Which function sorts a DataFrame by a specific column? *   1/1

    ● a) df.sort_values()   ✓

    ○ b) df.arrange()

    ○ c) df.orderby()

    ○ d) df.sortby()

✓ 34. What does df.iloc[2] return? *   1/1

    ● a) Third row of the DataFrame   ✓

    ○ b) Third column of the DataFrame

    ○ c) First two rows of the DataFrame

    ○ d) Last two rows of the DataFrame

✓ 35. What function is used to group data in Pandas? *   1/1

  ⊙ a) df.groupby()   ✓

  ○ b) df.aggregate()

  ○ c) df.group()

  ○ d) df.sortgroup()

✓ 36. Which function is used to calculate the mean of a column? *   1/1

  ⊙ a) df.mean()   ✓

  ○ b) df.average()

  ○ c) df.aggregate()

  ○ d) df.sum()

✓ 37. What does df.describe() return? *   1/1

  ⊙ a) Summary statistics of numerical columns   ✓

  ○ b) Column names

  ○ c) First few rows of the DataFrame

  ○ d) Datatypes of columns

✓ 38. What is the range of correlation values in Pandas? *   1/1

○ a) -2 to 2

◉ b) -1 to 1   ✓

○ c) 0 to 1

○ d) -0.5 to 0.5

✓ 39. Which correlation value indicates a strong positive correlation? *   1/1

○ a) -0.9

○ b) 0.2

◉ c) 0.8   ✓

○ d) 1.2

✓ 40. Which method in Pandas is used to check correlation? *   1/1

◉ a) df.corr()   ✓

○ b) df.cov()

○ c) df.describe()

○ d) df.stats()

✗ 41. What is the purpose of label encoding? *   0/1

○ a) Assigning unique numeric values to categorical variables

○ b) Normalizing data

○ c) Identifying missing values

◉ d) Reducing dimensionality   ✗

Correct answer

◉ a) Assigning unique numeric values to categorical variables

---

✗ 42. Which function in Pandas is used for one-hot encoding? *   0/1

○ a) pd.get_dummies()

◉ b) pd.onehotencode()   ✗

○ c) pd.dummyencode()

○ d) pd.categorical_to_num()

Correct answer

◉ a) pd.get_dummies()

✓ 43. What is the output of print(5/0)? *   1/1

○ a) 0

○ b) None

◉ c) ZeroDivisionError   ✓

○ d) SyntaxError

✓ 44. Which keyword is used to handle exceptions in Python? *   1/1

○ a) catch

○ b) error

◉ c) try   ✓

○ d) handle

✗ 45. How do you read a file in Python? *   0/1

○ a) open(filename, 'r')

◉ b) read(filename)   ✗

○ c) load(filename)

○ d) fetch(filename)

Correct answer

◉ a) open(filename, 'r')

✗ 46. Which library is best for numerical computing in Python? *   0/1

◉ a) Pandas   ✗

○ b) NumPy

○ c) Seaborn

○ d) Sklearn

Correct answer

◉ b) NumPy

✓ 47. What does np.array([1, 2, 3]) return? * 1/1

○ a) A Python list

● b) A NumPy array ✓

○ c) A Pandas DataFrame

○ d) A dictionary

✗ 48. What is the primary use of Scikit-learn? * 0/1

○ a) Machine learning

● b) Data visualization ✗

○ c) Data storage

○ d) Web scraping

Correct answer

● a) Machine learning

✗ 49. What does df.info() return? * 0/1

○ a) Data types and memory usage

○ b) First few rows of DataFrame

○ c) Number of null values

● d) Data summary statistics ✗

Correct answer

● a) Data types and memory usage

✓   50. What is the purpose of plt.show() in Matplotlib? *   1/1

○   a) To close the plot

○   b) To save the plot

◉   c) To display the plot   ✓

○   d) To clear the plot

Google Forms