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**Milestone Assessment 2 – Python – Set 1**

**Linux 1.2**

**Question 1:**

**Working with Python Libraries (Different Modules) Task:**

**1. Use the time module to print the current time in HH:MM:SS format.**

**Program:**

Datetime module is imported for generating the time

Then using the module the data has been represented as requested

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**Output:**

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**2. Use the math module to calculate and print the square root of 625.**

**Program:**

Math module is imported

Then it is renamed as m

Sqrt() function is used to find the square root of the specific number

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**Output:**

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**3. Use the random module to generate a random integer between 1 and 100 (inclusive).**

**Program:**

Random module is imported

RandomInt(1,100)

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**Output:**

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**4. Use the os module to list all files and directories in the current working directory.**

**Program:**

OS module is imported

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**Question 2:**

**File Handling and Log Analysis (Different File Content)**

1. **You have a file named server\_log.txt that logs user actions on a website. Perform the following tasks:**

**Tasks:**

**Create a file server\_log.txt with the following content:**

**[INFO] Login attempt from IP 192.168.1.2**

**[INFO] Page visited: Home**

**[ERROR] Timeout during checkout**

**[INFO] Logout successful**

**[WARNING] High memory usage detected**

**[ERROR] Payment failed**

The file with the name of server\_log.txt has been created

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1. **Write a Python script to read and display the content.**

To open the file use open() function

To read the content use read() or readline() methods

**Program:**

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**Output:**

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1. **Count the total number of lines in the file.**

To count the number of lines I have used a counter

**Program:**

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**Output:**

**A screenshot of a computer

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1. **Count how many lines contain the word "INFO".**

To count how many lines contain the word “INFO” I have used in in each line.

**Program:**

**A close-up of a computer code

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**Output:**

**A screenshot of a computer

AI-generated content may be incorrect.**