

---

---

Your text here 2

**Question : 1**

**20 Marks**

Load the TrainingHours column into a NumPy array.

- Convert to float datatype
- Find **mean & standard deviation**

**Final output:** Two numeric values

Question : 2	20 Marks
<p>Handle missing values (if any):</p> <ul style="list-style-type: none"> <li>• Fill missing <b>Salary</b> with department-wise median</li> <li>• Calculate <b>total Salary sum for employees with ExperienceYears &gt; 12 and ProjectCount &gt; 5</b></li> </ul> <p><b>Final output:</b> One numeric value</p>	

Question : 3	20 Marks
<p>Filter employees who:</p> <ul style="list-style-type: none"> <li>• Department = "IT" or "Finance"</li> <li>• Age between 30–45</li> <li>• PerformanceScore &gt; 88</li> <li>• Sort by <b>Salary descending</b></li> </ul> <p><b>Final output:</b> Table with Name, Department, Salary, PerformanceScore</p>	

Question : 4	20 Marks
<p>Add new column <b>SalaryPerHour</b> = <math>\text{Salary} \div (\text{WorkHoursPerWeek} \times 4)</math></p> <ul style="list-style-type: none"> <li>• Filter <b>top 5 employees by SalaryPerHour</b></li> </ul> <p><b>Final output:</b> Table(5 Rows) with Name, SalaryPerHour</p>	

Question : 5	20 Marks
<p>Create a <b>stacked bar chart</b> showing the count of employees in each <b>Department</b>, separated by <b>Gender</b>.</p> <p><b>Dataset Columns Used:</b></p> <ul style="list-style-type: none"> <li>• Department → Categorical variable (IT, Finance, HR, Marketing, Management)</li> <li>• Gender → Categorical variable (Male, Female)</li> </ul> <p><b>Expected Output</b></p> <ul style="list-style-type: none"> <li>• A <b>stacked bar chart</b> where: <ul style="list-style-type: none"> <li>○ x-axis → Department</li> <li>○ y-axis → Number of employees</li> <li>○ Each bar split into Male and Female segments</li> <li>○ Colors differentiate gender</li> </ul> </li> </ul>	

