



**FOUNDATION EXAM MATERIAL RELEASE**

THEORY QUESTIONS

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| **SECTION** | **MARK** |
| **Theory Questions** | 31 |
| **Concept Questions** | 19 |
| **Challenges: students should choose two out of the three to answer** | |
| **Python Challenge** | 25 |
| **SQL Challenge** | 25 |
| **Javascript Challenge** | 25 |
| 1. **TOTAL** | **100** |

**Important notes:**

* This document shares the first section of the Foundation Assessment II which is composed of 9 Theory Questions
* It is worth just under a third of your assessment mark
* You have 24 hours before the assessment to prepare.
* If any plagiarism is found in how you choose to answer a question you will receive a 0 and the instance will be recorded. Consequences will occur if this is a repeated offence. You can remind yourself of the plagiarism policy [here](https://drive.google.com/file/d/1k9UaGOR7hx54QRZ8jvp2jtC4P-8_Rs4F/view?usp=sharing).

**Section 1: Theory Questions [31 marks]**

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| **1.1 What does SDLC stand for?**  Software development lifecycle | **1 mark** |

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| **1.2 What exception is thrown when you divide a number by 0?**    ZeroDivisionError | **1 mark** |

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| **1.3 What is the git command that moves code from the local repository**  **to the remote repository?**  Push | **1 mark** |

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| **1.4 What does NULL represent in a database?**    It represents a value that is unknown or not been recorded in a database. | **1 mark** |

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| **1.5 Name 2 responsibilities of the Scrum Master** | **2 marks** |

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| **1.6 Name 2 debugging methods, and when you would use them.** | **4 marks** |

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| **1.7 Looking at the following code, describe a case where this function**  **would throw an error when called.** Describe this case and talk about  what exception handling you’ll need.   |  | | --- | | **def can\_pay(price, cash\_given):**  **if cash\_given >= price:**  **return True**  **else:**  **return False** | | **5 marks** |

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| **1.8 What is git branching?** Explain how it is used in Git. | **6 marks** |

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| **1.9 Design a restaurant ordering system.**  You do not need to write code, but describe a high-level approach:   * 1. Draw a list of key requirements   2. What are your main considerations and problems?   3. What components or tools would you potentially use? | **10 marks** |