**Exercise 8 - Trace Tables**

|  |  |
| --- | --- |
| **1**  **Begin**  A ← 3  B ← 5  **While** A < 2 \* B  C ← A \* A  A ← A + 1  B ← B - 1  **End While**  **Print** C  **End** | **2**  **Begin**  A ← 12  B ← 3  **While** B > = 0  A ← A / B  B← B – 1  **Print** A  **End While**  **End** |
| **3**  **Begin**  A ← 4  B ← 2  **Repeat**  A ← A + 1  B ← B \* B  **Until** B > A  **Display** A, B  **End** | **4**  **Begin**  A ← 4  B ← 2  **Repeat**  A ← A - 1  B ← B \* B  **Until** A = 0  **Display** A, B  **End** |

**1**

|  |  |  |
| --- | --- | --- |
| **A** | **B** | **C** |
| 3 | 5 | - |
| 4 | 4 | 9 |
| 5 | 3 | 16 |
| 6 | 2 | 25 |

**Output** - 25

**2**

|  |  |
| --- | --- |
| **A** | **B** |
| 12 | 3 |
| 4 | 2 |
| 2 | 1 |
| 2 | 0 |
| Undefined (2 cannot be divided by 0) |  |

**Output** - 4, 2, 2, Program Crashes

**3**

|  |  |
| --- | --- |
| **A** | **B** |
| 4 | 2 |
| 5 | 4 |
| 6 | 16 |

**Output** - 6, 16

**4**

|  |  |
| --- | --- |
| **A** | **B** |
| 4 | 2 |
| 3 | 4 |
| 2 | 16 |
| 1 | 256 |
| 0 | 65,536 |

**Output** - 0, 65536