**1. Feature Under Test**

* **Income Tax Calculation** based on Annual Salary.

**2. Tax Bands**

| **Band** | **Salary Range (£)** | **Tax Rate** |
| --- | --- | --- |
| A | £0 – £12,570 | 0% |
| B | £12,571 – £50,270 | 20% |
| C | £50,271 – £125,140 | 40% |
| D | £125,141 and above | 45% |

**3. Test Cases**

**✅ Valid Boundary Test Cases**

| **Test Case ID** | **Description** | **Input (£)** | **Expected Tax Band** |
| --- | --- | --- | --- |
| TC01 | Minimum salary | 0 | 0% |
| TC02 | Just above minimum | 1 | 0% |
| TC03 | Just below 20% band | 12,569 | 0% |
| TC04 | Start of 20% band | 12,570 | 0% |
| TC05 | Start of 20-40% transition | 12,571 | 20% |
| TC06 | Upper edge of 20% band | 50,270 | 20% |
| TC07 | Start of 40% band | 50,271 | 40% |
| TC08 | Just before 45% band | 125,140 | 40% |
| TC09 | Start of 45% band | 125,141 | 45% |

**4. Expected Results**

* **Valid Inputs**: Correct tax band and rate based on salary.
* **Invalid Inputs**: System rejects negative values with an error message.