Software testing

Introduction to software testing - Exercise solutions

Exercise 1:

Design test cases to check the behavior of a function that returns a boolean indicating if the number specified as a parameter is even or not.

As we are not relying on any particular programming language, we must also take into account some additional invalid inputs, such as parameters that are not numbers. We could also check if the method deals with both positive and negative values. So a possible table for these test cases could be this one:

ID	Name	Data	Expected result
U1	PositiveEven	number=2	true
U2	NegativeEven	number=-14	true
U3	ZeroEven	number=0	true
U4	PositiveOdd	number=3	false
U5	NegativeOdd	number=-27	false
U6	InvalidInputString	number="Hello"	Exception thrown
U7	InvalidInputFloat	number=3.14	Exception thrown

We have omitted both columns *Preconditions* (since there's no particular precondition for any test case) and *Steps* (since user doesn't have to type anything). Besides, *Actual result* column has been omitted for simplicity (since it is going to be empty until we run this test).