**Name: MSSV:**

1. **Revisited Issue**

Consider a two versions of evolving software as follows

|  |  |
| --- | --- |
| int f(int n){  ...  if(n>0) return n;  else return -n;  } | int f(int n){  ...  if(n>3)  {  Global++;  return n;  }  else return -n;  } |
| Original requirement: Write a function f taking an integer parameter n that returns the absolute value of n. | Evolved requirement: Write a function f taking an integer parameter n that returns the absolute value of n. In addition, if n is greater than 3, f will increase the value of the global variable Global by 1. |

1. **Practice**

Resolve Issue 1 with the following programs (only need to produce test case suit fulfilling both programs)

|  |  |
| --- | --- |
| int f(int a, int b){  if(a>b) return a;  else return b;  } | int f(int a, int b){  if(a>2\*b)  {  Global++;  return a;  }  else return b;  } |

b)

|  |  |
| --- | --- |
| int f(int a, int b){  if(a>b) return a;  else return b;  } | int f(int a, int b){  if(a>2\*b && b==1)  {  Global++;  return a;  }  else return b;  } |

c)

|  |  |
| --- | --- |
| int g(int[] a, int n){  int s=0;  for (int i=0; i<n; i++) s+=a[i];  return s;  } | int g(int[] a, int n){  int s=0;  for (int i=0; i<n && a[i]%2==0; i++){  s+=a[i]; Global++;  }  return s;  } |

1. **Planning**

There are four majors phases in testing: **Plan**, **Design**, **Execution** and **Report**.

There are three major roles: **Leader**, **Designer**, **Tester**.

Fill the following tables:

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Action** | **Phase** | **Role** |
|  | Perform the test-cases | Execution | Tester |
|  | Produce flows to be covered |  |  |
|  | Decide whether manual of automatic testing should be done |  |  |
|  | Make a schedule of build release, test execution and report time |  |  |
|  | Preparing data to performing testing |  |  |
|  | Report a bug/defects |  |  |
|  | Identify the features to be tested |  |  |
|  | Write script to perform automatic testing |  |  |
|  | Decide what should be done next from the test resutls |  |  |
|  | Setup a server to deploy the build to be tested |  |  |
|  | Conduct final test report |  |  |
|  | Approve the test-cases |  |  |
|  | Re-test the fixed bugs |  |  |
|  | Decide the versions of browsers to be tested in a Web application |  |  |
|  | Try an ad-hoc pattern on the UI |  |  |