EMSE 6367: Software Testing

Quiz 4: Controlflow-based Coverage Criteria

(No late submission will be accepted)

Consider the following program that is supposed to check if the input data item is in the range 0 to 100, inclusive

```
int check(x);
int x;
{
  if ((x>=0)&& (x<=200))
  check=true;
  else check=false;
}</pre>
```

- a) Find a test set T which is adequate with respect to the **block coverage** and **does not** reveal the error
- b) Find a test set T which is adequate with respect to the **block coverage** and **reveals** the error
- c) Find a test set T which is adequate with respect to the **simple condition coverage** and **does not** reveal the error
- d) Find a test set T which is adequate with respect to the **simple condition coverage** and **reveals** the error
- e) Find a test set T which is adequate with respect to the <u>decision coverage</u> and <u>does not</u> reveal the error
- f) Find a test set T which is adequate with respect to the <u>decision coverage</u> and reveals the error
- g) Find a test set T which is adequate with respect to the **multiple condition coverage** and **does not** reveal the error
- h) Find a test set T which is adequate with respect to the <u>multiple condition coverage</u> and <u>reveals</u> the error