CSCE 330 Fall 2003

Quiz 7

Assigned Tuesday, 03-09-23

1. What is the weakest precondition of
   `a := b-2`
   when the postcondition is `a>2`?

   Answer: $b > 4$.

2. Give a loop invariant for this loop:

```
while (i <> n) do
  begin
    sum := sum+i;
    i := i+1
  end
```

   with precondition $i = 1 \wedge sum = 0$ and postcondition $sum = \sum_{j=1}^{n-1} j$.

   Answer: $sum = \sum_{j=1}^{i-1} j$