

CS4182 Homework Exercises 7

1. Use the while rule to prove that the following program segment is correct:

$\{i = 0 \wedge result = 1 \wedge n \geq 0\}$

```
while (i<n){  
    result=result*x;  
    i=i+1;  
}
```

$\{result = x^n\}$