

STA237 - Tutorial 2

1. (a)

```
func1a = function(x, n) {  
  output = 1  
  
  for (i in 1:n){  
    output = output * x  
    cat(format(i, width=6), format(output, width=10), "\n", sep="")  
  }  
  
  return(output)  
}
```


(b)

```
func1b = function(x,y) {  
  return(x + y)  
}
```


(c)

```
func1c = function(n) {  
  return(prod(1:n))  
}
```
2.

```
func2 = function(n) {  
  if(n == 0) {  
    return(1)  
  }  
  else {  
    return(n * func2(n-1))  
  }  
}
```