

1) (10 pts) DSN (Recursive Functions)

Complete the function below, to create a recursive function *productDigits* that takes in 1 parameter, a non-negative integer, n , and returns the product of n 's digits. For example *productDigits*(232) will return 12 ($2 \times 3 \times 2$), and *productDigits*(13999019) will return 0.

```
int productDigits(int number){  
  
    if(number < 10)  
        return number;  
    return (number%10) * productDigits(number/10);  
}
```

Grading:**3 pts for base case****7 pts for recursive call - 1 pt return, 2 pts for getting last digit, 1 pt mult, 1 pt rec call
2 pts number/10**