

## 1) (5 pts) DSN (Recursive Coding)

Write a recursive function that returns the product of the digits of its integer input parameter,  $n$ . You may assume that  $n$  is non-negative. For example, `productDigits(274)` should return 56, since  $2 \times 7 \times 4 = 56$ .

```
int productDigits(int n) {  
  
    if (n < 10)                // 1 pt  
        return n;              // 1 pt  
  
    return (n%10)*productDigits(n/10); // 1 pt return  
                                       // 1 pts n%10  
                                       // 1 pt *pD(n/10)  
}
```