

```
// Name: Justin Shaw
// Class: CS 5040
// Term: Summer 2019
// Instructor: Dr. Haddad
// Assignment: 1
// IDE: Atom
```

```
// print the result by calling a recursive helper function
```

```
METHOD RecursivelyCalculateExpression
```

```
BEGIN
```

```
    READ BaseValue          // read and store value of x in  $x^n$  equation
```

```
    READ ExponentValue      // read and store value of n in  $x^n$  equation
```

```
    PRINT (CALL RecursivelyCalculateExpression (BaseValue, ExponentValue))
```

```
END RecursivelyCalculateExpression
```

```
// use recursive helper function to return the value of  $x^n$  to be printed in the main function
```

```
METHOD RecursivelyCalculateExpression (x, n)
```

```
BEGIN
```

```
    IF (n == 0) THEN
```

```
        RETURN 1
```

```
    ELSE
```

```
        RETURN x times CALL RecursivelyCalculateExpression (x, n - 1)
```

```
    ENDIF
```

```
END RecursivelyCalculateExpression
```