**Finding Factorial of given number**

**[Recursion]**

***Algorithm***

***Main Algorithm***

|  |  |
| --- | --- |
| **Step 1** | Start Process |
| **Step 2** | Read number |
| **Step 3** | Assign result as Call Factorial Finder with number |
| **Step 4** | print “Result is ” result |
| **Step 5** | Stop Process |

***Factorial Finder***

|  |  |
| --- | --- |
| **Step 1** | Start Process |
| **Step 2** | Receive number |
| **Step 3** | If number equals to 1 then return 1 |
| **Step 4** | Else Compute number \* Call Factorial Finder with (number – 1) and return result |
| **Step 5** | Stop Process |

***Flow Chart***

***Pseudo Code***

***Main Pseudo Code***

START

READ number

SET result = CALL factorial\_finder(number)

PRINT “Result is:” result

STOP

***Factorial Finder Sub Routine PseudoCode***

START

PROCEDURE: factorial\_finder(number)

IF number equal to 1

RETURN 1

ELSE

RETURN number \* factorial\_finder(number - 1)

END IF

END PROCEDURE

STOP