Erfan Yeganehfar Factorial(5) and Factorial(7) Recursion Tracing

factorial(5)

factorial(5)

1st call
fact = 5 * factorial(4)
return 5*4*3*2*1*1

Returns long
120

2nd
fact = 4 * factorial(3)
return 4*3*2*1*1

3rd
fact = 3 * factorial(2)
return 3*2*1*1

4th
fact = 2 * factorial(1)
return 2*1*1

5th
fact = 1 * factorial(0)
return 1*1

Last call
return 1

factorial(7)

factorial(7)

1st call
fact = 7 * factorial(6)
return 7*6*5*4*3*2*1*1

Returns long
5040

2nd
fact = 6 * factorial(5)
return 6*5*4*3*2*1*1

3rd
fact = 5 * factorial(4)
return 5*4*3*2*1*1

4th
fact = 4 * factorial(3)
return 4*3*2*1*1

5th
fact = 3 * factorial(2)
return 3*2*1*1

6th
fact = 2 * factorial(1)
return 2*1*1

7th
fact = 1 * factorial(0)
return 1*1

Last call
return 1