# Exercises: Loops

This document defines in-class exercises from the ["Programming Basics" Course @ Software University](http://softuni.bg/courses/csharp-basics/).

## Calculate N!

Write a program that finds the **factorial** of a given **number**. Print the result on the console.

*Hints:*

1. **Declare** two variables (*n, factorial*).
2. **Assign** the ***factorial***variable the value of **1**.
3. **Read** the user input from the console.
4. **Calculate factorial** of the given number:
   1. Use any kind of loop that starts from **2** and ends at the **number** given in the user input **including**. E.g. *for(int i = 2; i <= n; i++)…*
   2. At each iteration of the loop calculate the product of ***factorial*** and the iterator variable ***i****.* E.g.  
      *factorial = factorial \* i;*
5. **Print** the result on the console.

|  |  |
| --- | --- |
| **n** | **factorial** |
| 5 | 120 |
| 6 | 720 |