

---

## Haskell — Various factorials

P32333\_en

---

Write 8 *essentially diferent* functions that compute the factorial of a natural number in Haskell. You can use recursion, final recursion, no recursion, guards, **if then else**, `map`, `fold`s, infinite lists...

### Specification

You should define the following functions:

```
fact1 :: Integer → Integer
fact2 :: Integer → Integer
fact3 :: Integer → Integer
fact4 :: Integer → Integer
fact5 :: Integer → Integer
fact6 :: Integer → Integer
fact7 :: Integer → Integer
fact8 :: Integer → Integer
```

### Sample input

```
fact1 6
fact2 6
fact3 6
fact4 6
fact5 6
fact6 6
fact7 6
fact8 6
fact1 20
```

### Sample output

```
720
720
720
720
720
720
720
720
720
2432902008176640000
```

### Problem information

Author : Jordi Petit

Translator : Jordi Petit

Generation : 2016-06-08 16:15:43

© Jutge.org, 2006–2016.

<http://www.jutge.org>