

GHCi: Getting started (1A)

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Based on

[Haskell in 5 steps](https://wiki.haskell.org/Haskell_in_5_steps)

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Interpreter GHCi

```
young@MNTSys-BB1 ~ $ ghci
```

```
GHCi, version 7.10.3: http://www.haskell.org/ghc/ :? for help
```

```
Prelude> "hello, world!"
```

```
"hello, world!"
```

```
Prelude> putStrLn "hello, world!"
```

```
hello, world!
```

Function

```
Prelude> let fac n = if n == 0 then 1 else n * fac (n-1)
```

```
Prelude> fac 5
```

```
120
```

```
Prelude> fac 2
```

```
2
```

```
Prelude> fac 3
```

```
6
```

```
Prelude> fac 4
```

```
24
```

```
Prelude>
```

Compiler GHC

```
young@MNTSys-BB1 ~ $ ghc -o hello hello.hs
```

```
[1 of 1] Compiling Main      ( hello.hs, hello.o )
```

```
Linking hello ...
```

```
young@MNTSys-BB1 ~ $ ./hello
```

```
hello, world!
```

```
young@MNTSys-BB1 ~ $ cat hello.hs
```

```
main = putStrLn "hello, world!"
```

Layout

```
main = do putStrLn "Type an integer : ?"
        x <- readLn
        if even x
        then putStrLn "even number"
        else putStrLn "odd number"
```

ghci multi-line

```
Prelude> :{
```

```
Prelude| main = do { putStrLn "Type an integer: "; x<-readLn;
```

```
Prelude| if even x then putStrLn "even" else putStrLn "odd"; }
```

```
Prelude| :}
```

References

- [1] <ftp://ftp.geoinfo.tuwien.ac.at/navratil/HaskellTutorial.pdf>
- [2] <https://www.umiacs.umd.edu/~hal/docs/daume02yaht.pdf>