

```
Last login: Fri Feb 21 11:26:52 on ttys002
(base) anapaolaoviedo@Anas-MacBook-Pro compmeth % ls
book      example
(base) anapaolaoviedo@Anas-MacBook-Pro compmeth % mix new bowling
* creating README.md
* creating .formatter.exs
* creating .gitignore
* creating mix.exs
* creating lib
* creating lib/bowling.ex
* creating test
* creating test/test_helper.exs
* creating test/bowling_test.exs
```

Your Mix project was created successfully.  
You can use "mix" to compile it, test it, and more:

```
cd bowling
mix test
```

Run "mix help" for more commands.

```
(base) anapaolaoviedo@Anas-MacBook-Pro compmeth % cd bowling
(base) anapaolaoviedo@Anas-MacBook-Pro bowling % mix test
Compiling 1 file (.ex)
Generated bowling app
Running ExUnit with seed: 670704, max_cases: 28
```

```
..
Finished in 0.00 seconds (0.00s async, 0.00s sync)
1 doctest, 1 test, 0 failures
(base) anapaolaoviedo@Anas-MacBook-Pro bowling % code .
zsh: command not found: code
(base) anapaolaoviedo@Anas-MacBook-Pro bowling % iex
Erlang/OTP 27 [erts-15.2.2] [source] [64-bit] [smp:14:14] [ds:14:1
4:10] [async-threads:1] [jit] [dtrace]
```

Interactive Elixir (1.18.2) – press Ctrl+C to exit (type h() ENTER for help)

```
iex(1)> game = List.duplicate([0, 0], 9) ++ [[0, 0, nil]]
[
```

```
[0, 0],  
[0, 0],  
[0, 0],  
[0, 0],  
[0, 0],  
[0, 0],  
[0, 0],  
[0, 0],  
[0, 0],  
[0, 0, nil]
```

```
]  
iex(2)> clear
```

```
iex(3)> mix test  
error: undefined function mix/1 (there is no such import)  
└ iex:3
```

```
** (CompileError) cannot compile code (errors have been logged)
```

```
iex(3)> cleat  
error: undefined variable "cleat"  
└ iex:3
```

```
** (CompileError) cannot compile code (errors have been logged)
```

```
iex(3)> clear
```

```
iex(4)>  
BREAK: (a)bort (A)bort with dump (c)ontinue (p)roc info (i)nfo  
        (l)oaded (v)ersion (k)ill (D)b-tables (d)istribution
```

```
a
(base) anapaolaoviedo@Anas-MacBook-Pro bowling % mix test
Running ExUnit with seed: 487880, max_cases: 28
```

```
warning: Bowling.score/1 is undefined or private
6 |         assert Bowling.score(game) == 0
   |         ~
1 | test/bowling_test.exs:6:20: BowlingTest."test gutter game"/
```

```
1) test gutter game (BowlingTest)
test/bowling_test.exs:4
** (UndefinedFunctionError) function Bowling.score/1 is undef
ined or private
code: assert Bowling.score(game) == 0
stacktrace:
  (bowling 0.1.0) Bowling.score([[0, 0], [0, 0], [0, 0], [0,
0], [0, 0], [0, 0], [0, 0], [0, 0], [0, 0], [0, 0, nil]])
  test/bowling_test.exs:6: (test)
```

```
Finished in 0.01 seconds (0.00s async, 0.01s sync)
```

```
1 test, 1 failure
```

```
(base) anapaolaoviedo@Anas-MacBook-Pro bowling % mix test
Compiling 1 file (.ex)
```

```
warning: variable "game" is unused (if the variable is not mea
nt to be used, prefix it with an underscore)
```

```
2 |     def score(game) do
   |     ~~~~
  | lib/bowling.ex:2:13: Bowling.score/1
```

```
Generated bowling app
```

```
Running ExUnit with seed: 333868, max_cases: 28
```

**warning:** comparison between distinct types found:

```
left == right
```

given types:

```
dynamic(nil) == integer()
```

where "left" (context ExUnit.Assertions) was given the type:

```
# type: dynamic(nil)
# from: test/bowling_test.exs:6
left = Bowling.score(game)
```

where "right" (context ExUnit.Assertions) was given the type:

```
# type: integer()
# from: test/bowling_test.exs:6
right = 0
```

While Elixir can compare across all types, you are comparing across types which are always disjoint, and the result is either always true or always false

typing violation found at:

```
6 |       assert Bowling.score(game) == 0
   |                                     ~
   |_____ test/bowling_test.exs:6:32: BowlingTest."test gutter game"/
```

1

```
1) test gutter game (BowlingTest)
   test/bowling_test.exs:4
   Assertion with == failed
   code:  assert Bowling.score(game) == 0
   left:  nil
   right:  0
```

stacktrace:

test/bowling\_test.exs:6: (test)

Finished in 0.00 seconds (0.00s async, 0.00s sync)

1 test, 1 failure

(base) anapaolaoviedo@Anas-MacBook-Pro bowling % mix test

Compiling 1 file (.ex)

Generated bowling app

Running ExUnit with seed: 845095, max\_cases: 28

.

Finished in 0.00 seconds (0.00s async, 0.00s sync)

1 test, 0 failures

(base) anapaolaoviedo@Anas-MacBook-Pro bowling % git status

fatal: not a git repository (or any of the parent directories): .git

(base) anapaolaoviedo@Anas-MacBook-Pro bowling % git init

Initialized empty Git repository in /Users/anapaolaoviedo/Documents/semester 4/compmeth/bowling/.git/

(base) anapaolaoviedo@Anas-MacBook-Pro bowling % git status

On branch main

No commits yet

Untracked files:

(use "git add <file>..." to include in what will be committed)

.formatter.exs

.gitignore

README.md

lib/

mix.exs

test/

nothing added to commit but untracked files present (use "git add" to track)

(base) anapaolaoviedo@Anas-MacBook-Pro bowling % git add .

(base) anapaolaoviedo@Anas-MacBook-Pro bowling % git status

On branch main

No commits yet

Changes to be committed:

(use "git rm --cached <file>..." to unstage)

```
new file:   .formatter.exs
new file:   .gitignore
new file:   README.md
new file:   lib/bowling.ex
new file:   mix.exs
new file:   test/bowling_test.exs
new file:   test/test_helper.exs
```

```
(base) anapaolaoviedo@Anas-MacBook-Pro bowling % git commit =m "Done with 'gutter game'"
```

```
zsh: m not found
```

```
(base) anapaolaoviedo@Anas-MacBook-Pro bowling % git commit -m "Done with 'gutter game'"
```

```
[main (root-commit) 92d0e2a] Done with 'gutter game'
```

```
Committer: Ana Paola Oviedo <anapaolaoviedo@Anas-MacBook-Pro.local>
```

Your name and email address were configured automatically based on your username and hostname. Please check that they are accurate

.

You can suppress this message by setting them explicitly. Run the following command and follow the instructions in your editor to edit it

your configuration file:

```
git config --global --edit
```

After doing this, you may fix the identity used for this commit with:

```
git commit --amend --reset-author
```

```
7 files changed, 91 insertions(+)
create mode 100644 .formatter.exs
create mode 100644 .gitignore
create mode 100644 README.md
create mode 100644 lib/bowling.ex
```

```
create mode 100644 mix.exs
create mode 100644 test/bowling_test.exs
create mode 100644 test/test_helper.exs
(base) anapaolaoviedo@Anas-MacBook-Pro bowling % mix test
Running ExUnit with seed: 230487, max_cases: 28
```

```
.
Finished in 0.00 seconds (0.00s async, 0.00s sync)
1 test, 0 failures
(base) anapaolaoviedo@Anas-MacBook-Pro bowling % mix tets
Compiling 1 file (.ex)
Generated bowling app
** (Mix) The task "tets" could not be found. Did you mean "test"?
(base) anapaolaoviedo@Anas-MacBook-Pro bowling % mix test
Running ExUnit with seed: 412037, max_cases: 28
```

```
.

1) test 'all ones' game (BowlingTest)
test/bowling_test.exs:9
Assertion with == failed
code:  assert Bowling.score(game) == 20
left:  0
right: 20
stacktrace:
  test/bowling_test.exs:11: (test)
```

```
Finished in 0.00 seconds (0.00s async, 0.00s sync)
2 tests, 1 failure
(base) anapaolaoviedo@Anas-MacBook-Pro bowling % iex
Erlang/OTP 27 [erts-15.2.2] [source] [64-bit] [smp:14:14] [ds:14:1
4:10] [async-threads:1] [jit] [dtrace]
```

```
Interactive Elixir (1.18.2) - press Ctrl+C to exit (type h() ENTER
for help)
```

```
iex(1)> game = List.duplicate([1, 1], 9) ++ [[1, 1, nil]]
[
  [1, 1],
  [1, 1],
```

```

    [1, 1],
    [1, 1],
    [1, 1],
    [1, 1],
    [1, 1],
    [1, 1],
    [1, 1],
    [1, 1, nil]
]
iex(2)> 1
error: undefined variable "1"
└─ iex:2

```

**\*\* (CompileError) cannot compile code (errors have been logged)**

```

iex(2)> mix test
error: undefined function mix/1 (there is no such import)
└─ iex:2

```

**\*\* (CompileError) cannot compile code (errors have been logged)**

```

iex(2)>
BREAK: (a)bort (A)bort with dump (c)ontinue (p)roc info (i)nfo
        (l)oaded (v)ersion (k)ill (D)b-tables (d)istribution
a
(base) anapaolaoviedo@Anas-MacBook-Pro bowling % mix test
Compiling 1 file (.ex)
Generated bowling app
Running ExUnit with seed: 391863, max_cases: 28

```

```

..
Finished in 0.00 seconds (0.00s async, 0.00s sync)
2 tests, 0 failures
(base) anapaolaoviedo@Anas-MacBook-Pro bowling % git commit -a -m
"Done with 'all ones game'"
[main a48c90f] Done with 'all ones game'
  Committer: Ana Paola Oviedo <anapaolaoviedo@Anas-MacBook-Pro.local>
l>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate

```



.

You can suppress this message by setting them explicitly. Run the following command and follow the instructions in your editor to edit your configuration file:

```
git config --global --edit
```

After doing this, you may fix the identity used for this commit with:

```
git commit --amend --reset-author
```

```
2 files changed, 11 insertions(+), 2 deletions(-)
(base) anapaolaoviedo@Anas-MacBook-Pro bowling % git commit -a -m
"Done with 'all ones game'"
On branch main
nothing to commit, working tree clean
(base) anapaolaoviedo@Anas-MacBook-Pro bowling %
```