[**Programming a Guessing Game**](https://doc.rust-lang.org/book/ch02-00-guessing-game-tutorial.html#programming-a-guessing-game)

**1.** [**Setting Up a New Project**](https://doc.rust-lang.org/book/ch02-00-guessing-game-tutorial.html#setting-up-a-new-project) ⭐

**2.** [**Processing a Guess**](https://doc.rust-lang.org/book/ch02-00-guessing-game-tutorial.html#processing-a-guess)

**a.** [**Storing Values with Variables**](https://doc.rust-lang.org/book/ch02-00-guessing-game-tutorial.html#storing-values-with-variables) ⭐

**b.** [**Receiving User Input**](https://doc.rust-lang.org/book/ch02-00-guessing-game-tutorial.html#receiving-user-input) ⭐

**c.** [**Handling Potential Failure with Result**](https://doc.rust-lang.org/book/ch02-00-guessing-game-tutorial.html#handling-potential-failure-with-result)

**d.** [**Printing Values with println! Placeholders**](https://doc.rust-lang.org/book/ch02-00-guessing-game-tutorial.html#printing-values-with-println-placeholders)

**e.** [**Testing the First Part**](https://doc.rust-lang.org/book/ch02-00-guessing-game-tutorial.html#testing-the-first-part)

**3.** [**Generating a Secret Number**](https://doc.rust-lang.org/book/ch02-00-guessing-game-tutorial.html#generating-a-secret-number) ⭐

**a.** [**Using a Crate to Get More Functionality**](https://doc.rust-lang.org/book/ch02-00-guessing-game-tutorial.html#using-a-crate-to-get-more-functionality) ⭐

**i.** [**Ensuring Reproducible Builds with the *Cargo.lock* File**](https://doc.rust-lang.org/book/ch02-00-guessing-game-tutorial.html#ensuring-reproducible-builds-with-the-cargolock-file) ⭐

**ii.** [**Updating a Crate to Get a New Version**](https://doc.rust-lang.org/book/ch02-00-guessing-game-tutorial.html#updating-a-crate-to-get-a-new-version) ⭐

**b.** [**Generating a Random Number**](https://doc.rust-lang.org/book/ch02-00-guessing-game-tutorial.html#generating-a-random-number) ⭐

**4.** [**Comparing the Guess to the Secret Number**](https://doc.rust-lang.org/book/ch02-00-guessing-game-tutorial.html#comparing-the-guess-to-the-secret-number) ⭐

**5.** [**Allowing Multiple Guesses with Looping**](https://doc.rust-lang.org/book/ch02-00-guessing-game-tutorial.html#allowing-multiple-guesses-with-looping)

**a.** [**Quitting After a Correct Guess**](https://doc.rust-lang.org/book/ch02-00-guessing-game-tutorial.html#quitting-after-a-correct-guess)

**b.** [**Handling Invalid Input**](https://doc.rust-lang.org/book/ch02-00-guessing-game-tutorial.html#handling-invalid-input)