

🎉 Congratulations! You passed!

Grade received 100% Latest Submission Grade 100% To pass 80% or higher

Quiz Go to questions

Basics of Rust programming

Review Learning Objectives

1. What is Rust? 1 / 1 point

- ☒ Submit your assignment for document formatting
- ☐ A programming language for web development
- ☐ A scripting language for automation tasks
- ☒ Try again A systems programming language focused on safety and performance

☒ Correct

☒ Receive grade! Rust is a systems programming language that prioritizes safety and performance.

To Pass 80% or higher

Your grade is the purpose of the break and continue statements in Rust?

100% 1 / 1 point

- ☒ To control the flow of loops
- ☐ To define functions and procedures in Rust
- ☒ View Feedback
- ☐ To handle error conditions during runtime
- We keep your highest score
- ☐ To manage memory allocation in Rust

☒ Correct

☐ Like ☐ Dislike ☐ Report an issue

Correct! The break statement is used to exit a loop, and the continue statement is used to skip the rest of the current iteration and move to the next one.

3. What does the borrowing concept in Rust refer to? 1 / 1 point

- ☐ Cloning data structures for efficient memory usage
- ☒ Borrowing immutable or mutable references to data
- ☐ Creating temporary variables for code optimization
- ☐ Sharing mutable references to data
- ☒ Correct
- Correct! The borrowing concept in Rust refers to the practice of borrowing immutable or mutable references to data instead of taking ownership.

4. What is the purpose of using panic to stop a program in Rust? 1 / 1 point

- ☐ To release allocated memory resources
- ☐ To catch and handle exceptions during runtime
- ☐ To handle errors gracefully and continue program execution
- ☒ To abort program execution and display an error message
- ☒ Correct
- Correct! Using panic in Rust will immediately stop program execution and display an error message.

5. What is the role of match control flow statement in Rust? 1 / 1 point

- ☐ Controlling the execution flow of loops
- ☐ Handling errors and exceptions during program execution
- ☐ Defining the syntax and structure of functions in Rust
- ☒ Evaluating multiple conditions and selecting the first matching pattern
- ☒ Correct
- Correct! The match control flow statement in Rust evaluates multiple conditions and selects the first matching pattern.

6. What is the purpose of the while loop in Rust? 1 / 1 point

- ☐ Executing a block of code a specific number of times
- ☐ Iterating over a range of values
- ☐ Breaking out of a loop based on a condition
- ☒ Performing an action repeatedly as long as a condition is true
- ☒ Correct
- Correct! The purpose of the while loop in Rust is to perform an action repeatedly as long as a condition is true.

7. What does it mean for a variable to be shadowed in Rust? 1 / 1 point

- ☐ Assigning a new value to an immutable variable
- ☒ Creating a new variable with the same name as an existing one
- ☐ Marking a variable as unused and optimizing it away
- ☐ Hiding the variable from the program's memory
- ☒ Correct
- Correct! Shadowing a variable in Rust involves creating a new variable with the same name as an existing one, effectively "shadowing" the previous value.

8. What is the purpose of the if/else expression in Rust? 1 / 1 point

- ☐ Creating named functions with branching logic
- ☒ Conditional branching based on a boolean expression
- ☐ Defining the syntax and structure of loops in Rust
- ☐ Handling errors and exceptions during program execution
- ☒ Correct
- Correct! The purpose of the if/else expression in Rust is to perform conditional branching based on a boolean expression.

9. What is the purpose of using arguments in Rust functions? 1 / 1 point

- ☐ Enabling AI-powered code suggestions and completions
- ☐ Optimizing memory allocation and usage
- ☐ Defining the visibility and access level of functions
- ☒ Passing data to functions for processing and computation
- ☒ Correct
- Correct! The purpose of using arguments in Rust functions is to pass data to functions for processing and computation.

10. What is the purpose of the return values in Rust functions? 1 / 1 point

- ☐ Controlling the flow of execution within a function
- ☐ Enabling AI pair-programming capabilities
- ☐ Determining the number of iterations in a loop
- ☒ Providing a result or output from a function to the caller
- ☒ Correct
- Correct! The purpose of return values in Rust functions is to provide a result or output from a function to the caller.

