Putu Metta Puspita Dewi

E2100311

Assignment 1 Question 2

Analysis

In this program, there are simulate of a guessing game. This guessing game will be guess a number. So, it is will be having two players, who will taking turns to guess a random number from the integer number. The integer number will be in the scale of 0 to 100. The players have to guess from that scale of number, whenever the players guess the wrong number, the scale of number will be narrow. Example when the scale number from 0 🡪 100, the player guess 75, and it’s wrong. So the scale of number will be narrow to 76 🡪 99. From this example, this scale of number have a rules to changed their number. Whenever the player guess a lower number that the straight answer, the lower limit will be increased by one number. Also, whenever the player guess a greater number that the straight answer, the greater limit will be reduced by one number. The consclusion is the wrong number that guessed by the player, will not be included in the next scale of number. When the player guess the wrong number, the program will display “Incorrect. Try again!”. The program also will count how much attempts the players do to be the winner. To determine the winner, in this program the player who can guess the straight answer first will be the winner on this game section.

Determine Spefications

Input Process Output

The players used to input

their guessed number

from the scale of number.

“Congratulation Player ‘ ‘ wins” will represent when the player successfully guess the number and be the winner.

“Incorrect. Try again!” will represent whenever the player can’t guess the correct number.

The scale of number will be narrow until the players can guess the correct number.

Create a Design

Pseudocode

* To import the function, import random to generate the random integer number, that will be use to guess the number.
* Create the main function, decide the lowest digit is 0
* Create the main function, decide the greater digit is 100
* Create the variable to discriminate the looping to player 1 and player 2. Also the condition variable when the player is win.
* When the condition the player has not won the game, use WHILE repetition for the looping.
* Create rules to know which player will start the game, with using if-else.
* When starts the game, print the player that starts the game.
* Print the scale of the number as an output.
* Prompt the players to insert their guessed number.
* Process it by determined the guessed number wheter is less or greater than the straight answer.
* If the guessed number is not equal to the straight answer, print the output “Incorrect. Try again!”
* The scale of the number will be changed, when the guessed number is less than the straight answer, the lower limit will be increased by one number. When the guessed number is greater that the straight answer, the greater limit will be reduced by one number.
* To continue the game section, add condition = 1. When player 1 guessed the wrong number and it player 2’s turn.
* When the player wins the game section, add condition = 2
* Print the output when the player has won the game section, “Congratulation player ‘ ‘ wins.”
* To continue the game section, add condition = 0. When player 2 guessed the wrong number and it player 1’s turn.
* When the player wins the game section, add condition = 2
* Print the output when the player has won the game section, “Congratulation player ‘ ‘ wins.”

Testing

>>>

Range: 0 --> 100. Your guess? 70

player 1

Incorrect. Try again!

Range: 0 -->69. Your guess? 54

player 2

Incorrect. Try again!

Range: 55-->69. Your guess?65

player 1

Incorrect. Try again!

Range: 55 -->64. Your guess? 57

player 2

Incorrect. Try again!

Range: 58-->64. Your guess?60

player 1

Incorrect. Try again!

Range: 58 -->59. Your guess? 58

player 2

Incorrect. Try again!

Range: 59-->59. Your guess?59

Congratulation!player 2 wins

You managed to guess it in 6 attempts

>>> main()

Operation and Maintenance

This guessing game will be running well if the programmer do the right maintenance. Guess the Number game should maintain to ensure the turns of both player is right. Ensure to know which player will start the game first, so the turn’s of player will be clear. When the player answer, pay close attention to the answer. If the answer is not equal to the straight answer, make sure the message “Incorrect. Try again!” is out. Also, if the answer is finally correct and already have the winner, make sure the message “Congratulation player ‘ ‘ wins.”is out. The programmer should have pay attention with every details of the rules code, so the program can run clearly. And have to make sure, the winner of this game can guess the straight answer correctly.