Future Intern as Python Development

Task 2

Task: Rock, paper, scissors game

Create a program that allows users to play the classic game of rock, paper, and scissors against the computer. The user will input their choice, and the computer will randomly select one of the three options. The program will then determine the winner based on the rules of the game and display the result. The game will continue until the user decides to stop playing.

Solution:

```python
import random

def get_computer_choice():
    choices = ['rock', 'paper', 'scissors']
    return random.choice(choices)

def get_user_choice():
    choice = input("Enter your choice (rock, paper, or scissors): ").lower()
    while choice not in ['rock', 'paper', 'scissors']:
        print("Invalid choice. Please choose rock, paper, or scissors.")
        choice = input("Enter your choice (rock, paper, or scissors): ").lower()
    return choice

def determine_winner(user_choice, computer_choice):
    if user_choice == computer_choice:
        return "It's a tie!"
    elif (user_choice == 'rock' and computer_choice == 'scissors') or \
         (user_choice == 'paper' and computer_choice == 'rock') or \
         (user_choice == 'scissors' and computer_choice == 'paper'):
        return "You win!"
    else:
        return "You lose!"
```

```python
def play_game():
    print("Welcome to Rock, Paper, Scissors!")
    while True:
        user_choice = get_user_choice()
        computer_choice = get_computer_choice()

        print(f"You chose: {user_choice}")
        print(f"Computer chose: {computer_choice}")

        result = determine_winner(user_choice, computer_choice)
        print(result)

        play_again = input("Do you want to play again? (yes/no): ").lower()
        if play_again != 'yes':
            print("Thanks for playing! Goodbye!")
            break

play_game()
```

```
Welcome to Rock, Paper, Scissors!
Enter your choice (rock, paper, or scissors): ROCK
You chose: rock
Computer chose: paper
You lose!
Do you want to play again? (yes/no): NO
Thanks for playing! Goodbye!
```