## Code

import random def get\_computer\_choice(): return random.choice(["rock", "paper", "scissors"]) def get\_user\_choice(): while True: choice = input("Enter rock, paper, or scissors: ").strip().lower() if choice in {"rock", "paper", "scissors"}: return choice print("Invalid choice. Please try again.") def determine\_winner(user, computer): if user == computer: return "It's a tie!" elif (user == "rock" and computer == "scissors") or \ (user == "paper" and computer == "rock") or \ (user == "scissors" and computer == "paper"): return "Congratulations! Its celebration time" else: return " You lost! Better luck next time! ..." def play(): user\_choice = get\_user\_choice() computer\_choice = get\_computer\_choice() print(f"\nYou chose: {user\_choice}") print(f"Computer chose: {computer\_choice}") print(determine\_winner(user\_choice, computer\_choice)) if \_\_name\_\_ == "\_\_main\_\_":

play()

## **Outputs:-**

```
if __name__ == "__main__":
    play()

Enter rock, paper, or scissors: rock
You chose: rock
Computer chose: scissors
Congratulations! Its celebration time
```

Figure-1

```
if __name__ == "__main__":
    play()

Enter rock, paper, or scissors: paper
You chose: paper
Computer chose: scissors

You lost! Better luck next time! 
You
```

Figure-2

```
play()

→ Enter rock, paper, or scissors: paper
You chose: paper
Computer chose: paper
It's a tie!
```

Figure-3

```
result = winner(user_choice, computer_choice)
print(result)

if __name__ == "__main__":
    play()

*** Enter rock, paper, or scissors: stone
Invalid choice. Please try again.
Enter rock, paper, or scissors:
```

Figure-4

## **OUTPUT EXPLANATION**

When you run the script, it follows these steps:

- 1. User Input:
  - o The program prompts the user to enter "rock", "paper", or "scissors".
  - o If the user enters an invalid choice, it asks again (figure 4.)
- 2. Computer's Choice:
  - o The program randomly selects one of "rock", "paper", or "scissors".
- 3. Displaying Choices:
  - o The program prints what the user and the computer chose.
- 4. Determining the Winner:
  - $_{\circ}$  If the user's choice beats the computer's  $\rightarrow$  "Congratulations! Its celebration time" (Figure 1.)
  - Otherwise, the computer wins → " You lost! Better luck next time!
     ... " (Figure 2.)
  - $\circ$  If both choices are the same  $\rightarrow$  "It's a tie!" (Figure 3.)