**Pre-Work Program**

# import random module

import random

# Print multiline instruction

# performstring concatenation of string

print("Winning Rules of the Rock paper scissor game as follows: \n"

+"Rock vs paper->paper wins \n"

+ "Rock vs scissor->Rock wins \n"

+"paper vs scissor->scissor wins \n")

while True:

print("Enter choice \n 1. Rock \n 2. paper \n 3. scissors \n")

# take the input from user

choice = int(input("User turn: "))

# OR is the short-circuit operator

# if any one of the condition is true

# then it return True value

# looping until user enter invalid input

while choice > 3 or choice < 1:

choice = int(input("enter valid input: "))

# initialize value of choice\_name variable

# corresponding to the choice value

if choice == 1: # user defined function

choice\_name = 'Rock'

elif choice == 2:

choice\_name = 'paper'

else:

choice\_name = 'scissors'

# print user choice

print("user choice is: " + choice\_name)

print("\nNow its computer turn.......")

# Computer chooses randomly any number

# among 1 , 2 and 3. Using randint method

# of random module

comp\_choice = random.randint(1, 3)

# looping until comp\_choice value

# is equal to the choice value

while comp\_choice == choice:

comp\_choice = random.randint(1, 3)

# initialize value of comp\_choice\_name

# variable corresponding to the choice value

if comp\_choice == 1:

comp\_choice\_name = 'Rock'

elif comp\_choice == 2:

comp\_choice\_name = 'paper'

else:

comp\_choice\_name = 'scissor'

print("Computer choice is: " + comp\_choice\_name)

print(choice\_name + " V/s " + comp\_choice\_name)

# condition for winning

if((choice == 1 and comp\_choice == 2) or

(choice == 2 and comp\_choice ==1 )):

print("paper wins => ", end = "")

result = "paper"

elif((choice == 1 and comp\_choice == 3) or

(choice == 3 and comp\_choice == 1)):

print("Rock wins =>", end = "")

result = "Rock"

else:

print("scissor wins =>", end = "")

result = "scissor"

# Printing either user or computer wins

if result == choice\_name:

print("<== You win! ==>")

else:

print("<== Computer wins ==>")

print("Do you want to play again? (Y/N)")

ans = input()

# if user input n or N then condition is True

if ans == 'n' or ans == 'N':

break

# after coming out of the while loop

# we print thanks for playing

print("\nThanks for playing")