Rock, Paper, Scissor game – Python Project

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Create the Rock, Paper and Scissors game with Python, we need to take the users choice and then we need to compare it computer choice which is taken using the random module in Python from a list of choices, and if the user wins, then the score will increase by 1.

Game Winner Conditions:

Let there be a Player who is playing with a computer as an opponent.

Now,

- If the player selects Paper and Computer Selects Scissor Computer wins
- If the player selects Rock and Computer Selects Scissor Player 1 wins
- If the player selects Paper and Computer Selects Rock Player 1 wins
- And if the player selects Paper and Computer Selects Paper Draw
- If the player selects Rock and Computer Selects Rock Draw
- If the player selects Scissor and Computer Selects Scissor Draw

Tools and Technologies Used:

• Random: Python defines a set of functions that are used to generate or manipulate random numbers through the random module.

INPUT:

```
import random
x=0
y=0
#Rock Paper Scissors
def gameWin (computer,you):
  #if two value are equal, declare a tie
  if computer == you:
     return None
  #check all the possibilities when computer chose r
  elif computer == 'r':
    if you == 's':
       return False
     elif you == 'p':
       return True
  #check for all possibilities when computer chose p
  elif computer == 'p':
    if you == 'r':
       return False
    elif you == 's':
       return True
  #check for all possibilities when c omputer chose s
  elif computer == 's':
     if you == 'p':
       return False
     elif you == 'r':
       return True
z="yes"
while z=="yes":
  print("Computer Turn: Rock(r) Paper(p) Scissors(s)?")
  randNo=random.randint(1, 3)
  if randNo==1:
     computer='r'
  elif randNo==2:
     computer='p'
  elif randNo==3:
     computer='s'
  you=input("Your Turn: Rock(r) Paper(p) Scissors(s)?")
  a=gameWin(computer, you)
  print(f"Computer chose {computer}")
  print(f"You chose {you})")
  if a == None:
     print("The game is a tie!")
     print("Your score: ",x)
     print("Computer score: ",y)
  elif a:
```

```
print("You Win!")
    x=x+1
    print("Your score: ",x)
    print("Computer score: ",y)
else:
    print("You Lose!")
    y+=1
    print("Your score: ",x)
    print("Computer score: ",y)
z=input("Do you still want to continue?(yes/no): ")
```

OUTPUT:

```
© C:\Program Files\WindowsAp ×
Computer Turn: Rock(r) Paper(p) Scissors(s)?
Your Turn: Rock(r) Paper(p) Scissors(s)?s
Computer chose p
You chose s
You Win!
Your score: 1
Computer score:
Do you still want to continue?(yes/no): yes
Computer Turn: Rock(r) Paper(p) Scissors(s)?
Your Turn: Rock(r) Paper(p) Scissors(s)?p
Computer chose p
You chose p
The game is a tie!
Your score:
            1
Computer score: 0
Do you still want to continue?(yes/no): yes
Computer Turn: Rock(r) Paper(p) Scissors(s)?
Your Turn: Rock(r) Paper(p) Scissors(s)?r
Computer chose s
You chose r
You Win!
Your score: 2
Computer score:
Do you still want to continue?(yes/no):
```