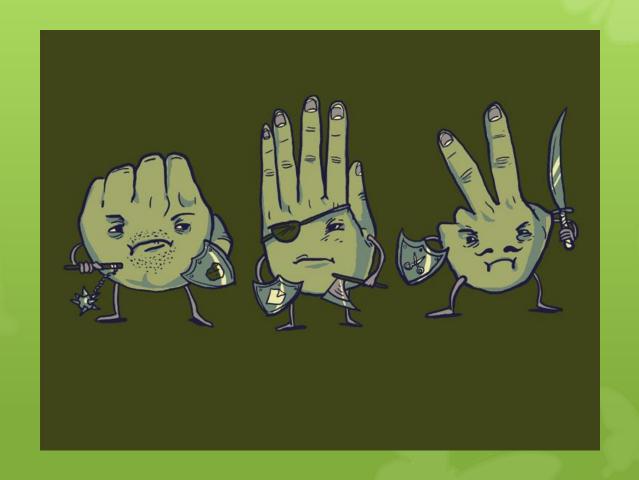


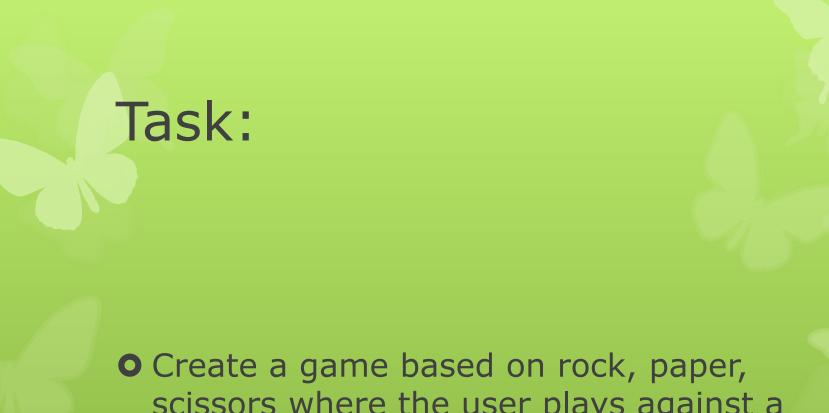
# C# Programming:

Logic for rock, paper, scissors

# C# Programming:

Logic for rock, paper, scissors





scissors where the user plays against a computer opponent

#### Needed elements

- Image(s) representing the 3 possible choices
- Buttons for each of the choices
- A randomization method generating a choice from 1-3
- Possible scoring routine
- Game logic

#### Random Method

- Private int RandomNumber(int min, int max)
  {
   Random random = new Random(); //Constructor
   Return random.Next(min, max);
  }
- Notice that this method takes 2 arguments
  - First argument is inclusive
  - Second argument is exclusive
- =<lower value, <upper value</p>

## How to employ Random Method

- Random method must be called by each of the buttons representing the 3 possible user choices. (Why?)
- When method is called, must pass values to random method
- int returnValue = RandomNumber(1,4);

## Game Logic

- There are 3 buttons one each representing either rock, paper or scissors.
- When one is chosen by user, the computer randomly generates its choice, examines the outcome (return value), and prints out the results of that round.

#### If and else if for a choice of Rock

- If the returnValue ==1
  - I chose Rock, we tied
- Else If the returnValue == 2
  - I chose paper, paper wraps rock, you lose
- Else If the returnValue == 3
  - I chose scissors, rock breaks scissor, you win.

#### How to add scoring

- Create 2 global variables (public), one representing the user's score and the other representing the computer's score.
- With a tie, no one wins, no score information required
- With a user loss, one point gets added to the computer's score.
  - Cscore=Cscore +1;
- With a user win, one point gets added to the user's score
  - Uscore=Uscore +1;

# More Scores

• After each round of the game, update the score and print to screen

## Finalizing Game

- Game ends when first player scores 10
- Test each value after each round to see if either score equals 10
  - If (Cscore == 10)
    - Print ("I win, you lose")
  - If (Uscore == 10)
    - Print ("Congratulations, you have won the game")

