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Rock Paper Scissor Game

Using C Programming

Code

```c
#include <math.h>
#include <stdio.h>
#include <stdlib.h>
#include <time.h>

// Function to implement the game
int game(char you, char computer)
{
    // If both the user and computer
    // has chose the same thing
    if (you == computer)
        return -1;
```

```
// If user's choice is stone and
// computer's choice is paper
if (you == 's' && computer == 'p')
    return 0;


// If user's choice is paper and
// computer's choice is stone
else if (you == 'p' && computer == 's')
    return 1;


// If user's choice is stone and
// computer's choice is scissor
if (you == 's' && computer == 'z')
    return 1;

// If user's choice is scissor and
// computer's choice is stone
else if (you == 'z' && computer == 's')
    return 0;

// If user's choice is paper and
// computer's choice is scissor
if (you == 'p' && computer == 'z')
    return 0;


// If user's choice is scissor and
// computer's choice is paper
else if (you == 'z' && computer == 'p')
    return 1;

}
```

```c
// Driver Code
int main()
{
    // Stores the random number
    int n;

    char you, computer, result;

    // Chooses the random number
    // every time
    srand(time(NULL));

    // Make the random number less
    // than 100, divided it by 100

    n = rand() % 100;

    // Using simple probability 100 is
    // roughly divided among stone,
    // paper, and scissor
    if (n < 33)

            // s is denoting Stone
            computer = 's';

    else if (n > 33 && n < 66)

            // p is denoting Paper
            computer = 'p';
```

```c
    // z is denoting Scissor
    else
        computer = 'z';

    printf("Enter s for STONE, p for PAPER
    and z for SCISSOR\n");

    // input from the user
    scanf("%c", &you);

    // Function Call to play the game
    result = game(you, computer);

    if (result == -1) {
            printf("Game Draw!\n");
    }
    else if (result == 1) {
            printf("Wow! You have won the
            game!\n");
    }
    else {
            printf("Oh! You have lost the
            game!\n");
    }
    printf("YOu choose : %c and Computer
    choose : %c\n",you, computer);

    return 0;
}
```
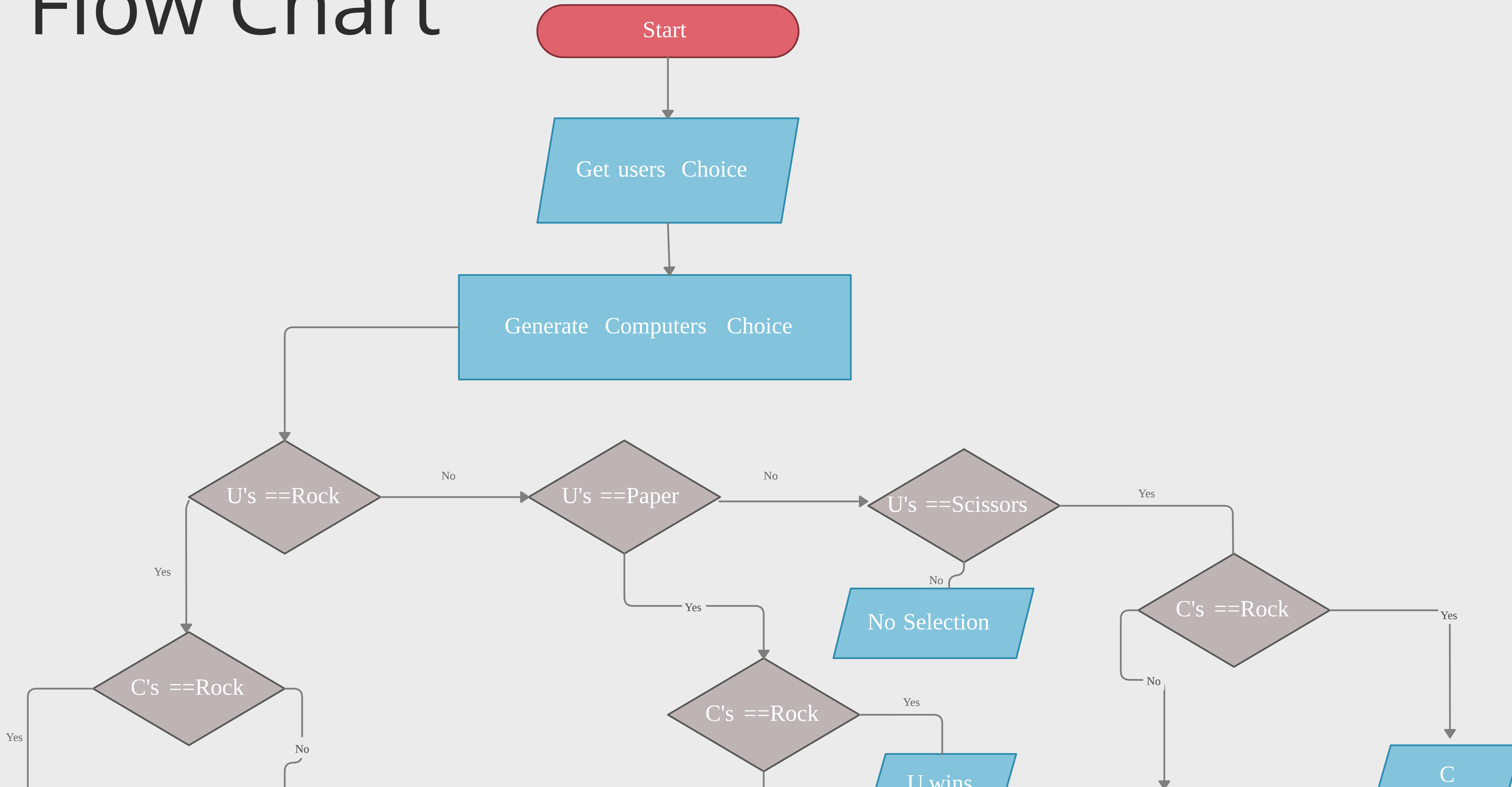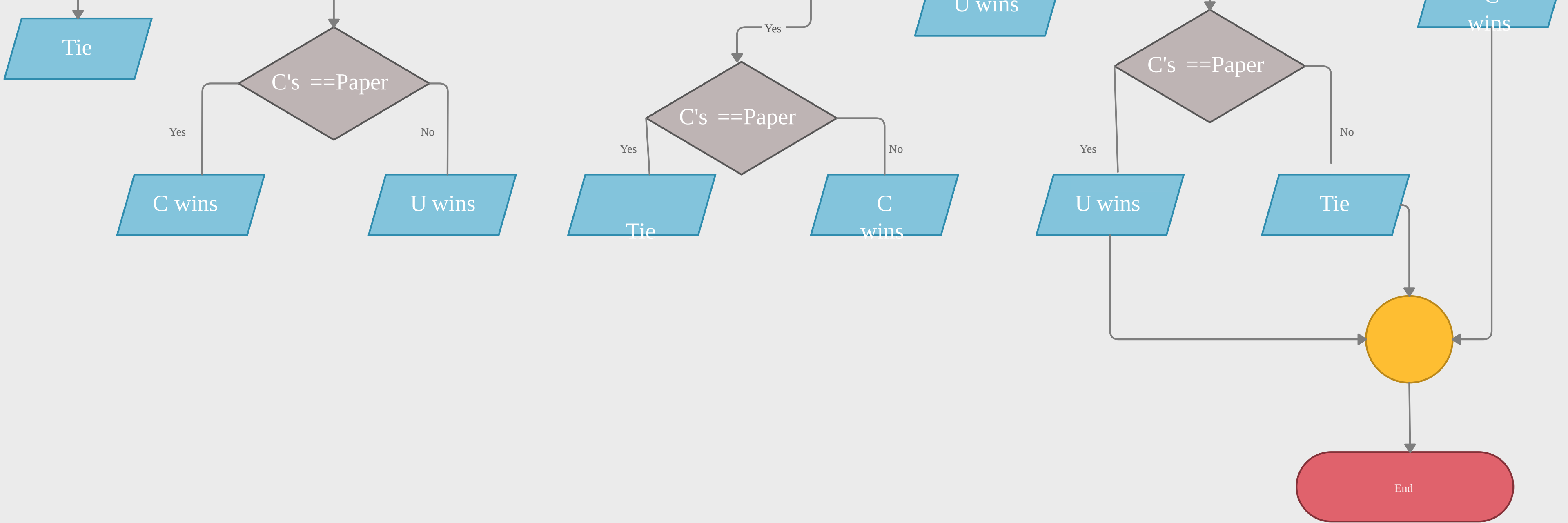
Flow Chart

Start

Get users Choice

Generate Computers Choice

U's ==Rock — No → U's ==Paper — No → U's ==Scissors — Yes →

U's ==Rock — Yes → C's ==Rock

U's ==Scissors — No → No Selection

C's ==Rock — Yes →

C's ==Rock

C's ==Rock — Yes → U wins

C's ==Rock — No →

C

Tie

C's ==Paper

Yes

No

C wins

U wins

U wins

C's ==Paper

Yes

No

Tie

C
wins

C
wins

C's ==Paper

Yes

No

U wins

Tie

End

```
/tmp/8pQrfojpP8.o
Enter s for STONE, p for PAPER and z for SCISSOR
s
Game Draw!
YOu choose : s and Computer choose : s
```

Game Draw

Game Loss

```
/tmp/8pQrfojpP8.o
Enter s for STONE, p for PAPER and z for SCISSOR
s
Oh! You have lost the game!
YOu choose : s and Computer choose : p
```

Game Win

```
/tmp/8pQrfojpP8.o
Enter s for STONE, p for PAPER and z for SCISSOR
p
Wow! You have won the game!
YOu choose : p and Computer choose : s
```

Thank you!