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In [1]: /*Reches P. Eric K.
20/09/2023
Lab 2 1.0*/
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In [2]: #include <iostream>
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In [ ]: bool isFirstPlayer = true;
bool rematch = true;
do{
    int row1 = 1; int row2 = 3;int row3 = 5;int row4 = 7;
    int turn = 0;
    while (true){
        turn++;
        printf("Turn %d\n",turn);
        if(isFirstPlayer == true){
            printf("Player 1\n");
        }
        else{
            printf("Player 2\n");
        }
        if (row1 > 0){
            printf("Number of Sticks: %d\n", row1);
        }
        if (row2 > 0){
            printf("Number of Sticks: %d\n", row2);
        }
        if (row3 > 0){
            printf("Number of Sticks: %d\n", row3);
        }
        if (row4 > 0){
            printf("Number of Sticks: %d\n", row4);
        }
        int row_number;
        printf("Pick a row:\n");
        std::cin >> row_number;
        if((row_number<=4) && (row_number>=1)){
            int st_num;
            printf("how many sticks would you like to remove: \n");
            std::cin >> st_num;
            if (st_num > 0){
                switch(row_number){
                    case 1:
                        row1 -= st_num;
                        if(isFirstPlayer == true){
                            isFirstPlayer = false;
                        }
                        else{
                            isFirstPlayer = true;
                        }
                        break;
                    case 2:
                        row2 -= st_num;
                        if(isFirstPlayer == true){
                            isFirstPlayer = false;
                        }
                }
            }
        }
    }
}
```

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        else{
            isFirstPlayer = true;
        }
        break;
    case 3:
        row3 -= st_num;
        if(isFirstPlayer == true){
            isFirstPlayer = false;
        }
        else{
            isFirstPlayer = true;
        }
        break;
    case 4:
        row4 -= st_num;
        if(isFirstPlayer == true){
            isFirstPlayer = false;
        }
        else{
            isFirstPlayer = true;
        }
        break;
    }
    }else{
        printf("please choose a valid number of sticks\n");
    }

}
else{
    printf("invalid choice\nplease choose different row\n");
}
if (row1 <= 0 && row2 <= 0 && row3 <= 0 && row4 <= 0){
    printf("The game is over\n");
    if(isFirstPlayer == true){
        printf("PLAYER 1 WINS\n");
    }
    else{
        printf("PLAYER 2 WINS\n");
    }
    printf("would you like a rematch: y or n\n");
    char option;
    std::cin>>option;
    if (option == 'y'){
        printf("starting rematch\n");
    }else{
        rematch = false;
        printf("thanks for playing");
    }
    break;
}

}
}while(rematch);

```

Turn 1
Player 1
Number of Sticks: 1
Number of Sticks: 3
Number of Sticks: 5
Number of Sticks: 7
Pick a row:

In []: