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Asgn1 Design.pdf: Left, Right, Center

This program simulates a game of Left, Right, Center. Between 1-14 players all start with \$3. Beginning with player 1, roll the dice:

- a. If the player has \$3 or more then she rolls three dice; if she has \$2 then she rolls two dice; if she has only \$1 then she rolls one die; if she has no money then she must pass.
- b. For each die:
 - i. If the player rolls L then she gives \$1 to the player on her left
 - ii. If the player rolls R then she gives \$1 to the player on her right
 - iii. If the player rolls C then she puts \$1 in the pot in the center
 - iv. If the player rolls • then she ignores it.

Move to the next player (to the right)

Continue until only one player with any money remains

Die: 3 × •, 1 × L, 1 × R, 1 × C

Die Symbol	Sides	% chance
L	1/6	16.66%
R	1/6	16.66%
C	1/6	16.66%
•	3/6	50%

Pseudocode:

Number of players = User input (between 1-14)

Random seed = random seed(User input)

alive = num of players

players = array of strings of length (num of players)

```
money = array of ints of length (num of players)
```

```
fill money with 3's
```

```
pot = 0
```

```
for (i in num players):
```

```
    players[i] = random name in philos.h
```

```
// Gameloop:
```

```
while (alive > 1):
```

```
    if (current player has money):
```

```
        for (money if (money < 3), else for 3): //use ternary operator!
```

```
            roll_dice()
```

```
            //MUST use die array given in doc instead of ints
```

```
            if die[roll] = "LEFT", they rolled left
```

```
                Deduct 1 from current player's money
```

```
                if money[left pos] == 0:
```

```
                    alive++
```

```
                Add 1 to player to the left's money //use left() code given in
```

```
docs
```

```
                print "gives $1 to [player to the left]"
```

```
            else if die[roll] = "RIGHT", they rolled right
```

```
                Deduct 1 from current player's money
```

```
                if money[right pos] == 0:
```

```
                    alive++
```

```
                Add 1 to player to the right's money //use right() code
```

```
given in doc
```

```
                print "gives $1 to [player to the right]"
```

```
            else if die[roll] = "CENTER", they rolled center
```

```
                Deduct 1 from current player's money
```

```
                Add 1 to the pot
```

```
                print "puts $1 in the pot "
```

```
            else:
```

```
                print "gets a pass "
```

```
                pass
```

```
        if (current player's money == 0):
```

```
            Alive--
```

```
// breaks only once alive <= 1
if (alive == 1):
    for (index in money):
        if money[index] != 0:
            print "players[index] wins the $[pot] pot with $[money[index]] in the
bank!"

roll_dice():
    roll = generate random number 0-5
```