# SIMULATION CLASS

## Variables:

sideOnTop: Integer variable that stores the current side on top (0 for heads, 1 for tails).

## Constants:

DEFAULT_SIDE_ON_TOP: Static final integer constant with the default value for sideOnTop (0).

## Libraries:

java.util: Used for the Random class to generate random numbers.

## Constructors:

### Default constructor:

1. Input arguments: None
2. Return type: None
3. Description: Initializes sideOnTop to the default value (0).

### Non Default constructor:

1. Input arguments:  (int newSideOnTop)
2. Return type: None
3. Description: Initializes sideOnTop to the provided value if it is valid (between 0 and 1). Otherwise, it remains at the default value (0).

## Methods:

1. **setSideOnTop(int newSideOnTop):**
   A. Input arguments: newSideOnTop (an integer representing the new side on top).
   B. Return type: None
   C. Description: Updates sideOnTop to the provided value if it is valid (between 0 and 1). Otherwise, it remains unchanged.

2. **getSideOnTop():**
   A. Input arguments: None
   B. Return type: int

C. Description: Returns the current value of sideOnTop (0 for heads, 1 for tails).

3. **toString():**
   A. Input arguments: None
   B. Return type: String
   C. Description: Currently just returns "flip = ".

4. **flip():**
   A. Input arguments: None
   B. Return type: int
   C. Description: Generates a random integer between 0 and 1, updates sideOnTop with the generated value, and returns the new value.