

LAB 1

1. Define a Dynamic Array with following characteristics

- Name of Array: da
- Type of array: int
- Size of array: 10 elements

Perform the following operations on this array

- Resize the array with retaining previous values: 20 elements
- Resize the array without retaining previous values : 20 elements

2. Define a Dynamic Array with following characteristics

- Name of Array: aa
- Type of array: int

3. Define a Queue with following characteristics

- Name of Array: coreel

Perform following operations on that queue

- Initialize the queue with Following Values = {1,2,3,4,5}
- Insert value {6} in the front
- insert value {7} at the Back
- pop from front
- pop from back

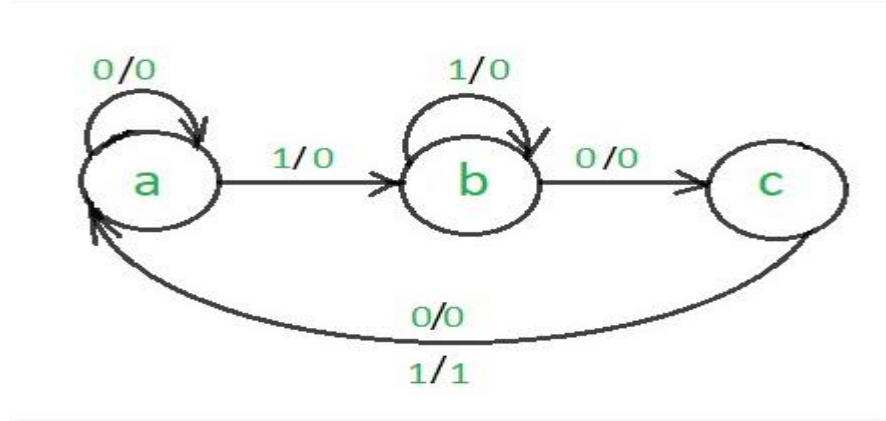
LAB 2:

1. Define A class with following characteristics

- Name of the Class: Packet
- properties of the class :
 - i. data of 3 bit width, of bit type
 - ii. addr of 8 bit width, of bit type
 - iii. ack of 1 bit width, of bit type
- Methods of class
 - iv. print method of void type
- Constructor with following details
 - v. data=3`b000;
 - vi. addr=8`b00000001;
 - vii. ack=1'b1;

LAB 3:

- Write Assertions for the FSM with following Mealy 101 sequence



- Assertion to check with following checks
 - i. To check reset of the design
 - ii. To check the proper transition in states

Labs 4 :

- Defining the Coverage which will Check all covered values in test bench
 - i. by using default bins
 - ii. by defining Array of bins