**Module: SV for Verification**

**Section:** Arrays **Task:** Queue & Array Methods

**Task**

Queue & Array Methods

* **Queue:**
  + **Code Snippet:**

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module queues;

byte queue[$:3] = { 2, -1, 127 }; // A queue of depth 3 i.e. can hold upto 3 bytes

int result[$];

byte temp[$];

initial begin

// Queue Sum

$display("Sum of queue is: %0d", queue.sum());

// Queue min

$display("Min of queue is: %p", queue.min());

// Queue max

$display("Max of queue is: %p", queue.max());

// Sort Queue

queue.sort();

$display("Sorted queue is: %p", queue);

// find Index of item < 0

result = queue.find\_index with (item < 0);

$display("Find Index : result[%0d] = -1", result[0]);

// find items > 0

temp = queue.find with (item > 0);

$display("Find Items : %p", temp);

// Reverse-Sort Queue

queue.rsort();

$display("Reverse-Sorted queue is: %p", queue);

end

endmodule

* **Output:**

