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public class stack_reversal {
    public static void main(String[] args) {
        stack_reversal sr = new stack_reversal(5);

        for (var i=0; i<5; i++) {
            sr.add_items(i+1);
        }

        sr.print_stack();
        sr.revrese_stack();
        System.out.println();
        sr.print_stack();
    }
}

```

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int[] arr;
int top, size, capacity;

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public stack_reversal(int capacity) {
    this.capacity = capacity;
    size = 0;
    top = -1;
    arr = new int[capacity];
}

```

```

public void print_stack() {
    for (var t=top; t>=0; t--) {
        System.out.print(arr[t] + " ");
    }
}

```

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public boolean is_full() {
    return size == capacity;
}

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public boolean is_empty() {
    return size == 0;
}

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private void swap_arr_items(int l, int r) {
    var tmp = arr[l];
    arr[l] = arr[r];
    arr[r] = tmp;
}

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private void master_reversal(int lb, int ub) {
    if (ub > lb) {
        swap_arr_items(lb, ub);
        lb++; ub--;
    }
}

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        master_reversal(lb, ub);
    }
}

public void revrese_stack() {
    master_reversal(0, size-1);
}

public void add_items(int key) {
    if (is_full()) {
        return;
    }
    arr[++top] = key;
    size++;
}
}
```