**EXPERIMENT NO.4**

**Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Aim:** Write a program in java to reverse a number using stack.

**Algorithm/Pseudo-Code:**

1. Push each no in stack1
2. Pop stack1 elements in stack2
3. Print stack2

**Program:**

class ReverseStack

{

int top=-1;

int []arr=new int[3];

void push(int item)

{

if(isFull())

System.out.println("");

else

{

++top;

arr[top]=item;

}

}

int pop()

{

if(isEmpty())

{

System.out.println("");

return 0;

}

else

{

int temp=arr[top];

top--;

return temp;

}

}

boolean isFull()

{

if(top>arr.length)

return true;

else

return false;

}

boolean isEmpty()

{

if (top<0)

return true;

else

return false;

}

void printStack()

{

for(int i=top;i>=0;i--)

System.out.print(pop());

}

public static void main(String[] args)

{

ReverseStack stack1=new ReverseStack();

stack1.push(4);

stack1.push(6);

stack1.push(9);

System.out.print("The no. is: ");

stack1.printStack();

ReverseStack stack2=new ReverseStack();

stack2.push(stack1.pop(););

stack2.push(stack1.pop(););

stack2.push(stack1.pop(););

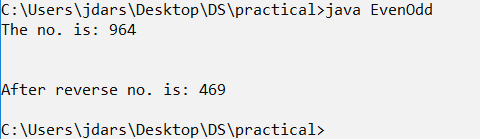
System.out.print("After reverse no. is: ");

stack2.printStack();

}

}

**Output:**

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