```
import java.util.Scanner;
public class StackUsingArray {
      int arr[];
      int top;
      StackUsingArray(int max)
            arr=new int[max];
            top=-1;
      }
      void push(int ele)
            if(is_full())
                  System.out.println("Stack Overflow");
            else
            top=top+1;
            arr[top]=ele;
      }
int pop()
            if(is_empty())
                  System.out.println("Stack Underflow");
                  return -1;
            }
            else
            {
                  int temp=arr[top];
                  top=top-1;
                  return temp;
            }
      int peek()
            if(is_empty())
                  System.out.println("Stack Underflow");
                  return -1;
            else
            {
                  return arr[top];
            }
      }
      boolean is_empty()
            if(top==-1)
                  return true;
            else
                  return false;
      }
      boolean is_full()
```

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if(top==arr.length-1)
            return true;
      else
            return false;
}
public static void main(String[] args) {
      Scanner <u>sc</u>=new Scanner (System.in);
      System.out.println("Enter the Stack size");
      int max=sc.nextInt();
      StackUsingArray s= new StackUsingArray(max);
      while(true)
      System.out.println("****MENU*****");
      System.out.println("0:Exit");
      System.out.println("1:Push");
      System.out.println("2:Pop");
System.out.println("3:Peek");
      System.out.println("********");
      System.out.println("Enter the choice");
      int choice=sc.nextInt();
      switch(choice)
      case 0:
      System.exit(0);
      case 1:
            System.out.println("Enter the element:");
            int e=sc.nextInt();
            s.push(e);
            break;
      case 2:
            int m=s.pop();
            if(m!=-1)
                   System.out.println("The popped value is: "+m );
            break;
      case 3:
             m=s.peek();
            if(m!=-1)
                   System.out.println("The Top value is: "+m );
            break:
      default:
      System.out.println("Wrong choice");
      }
}
```

}

```
import java.util.Scanner;
class Node {
    int info;
    Node link;
public class StackUsingLinkedList {
      static Node top=null;
      public static void push(int x)
    {
        Node p = new Node();
        p.info = x;
        p.link = top;
        top = p;
    }
      public static void pop()
        if(top==null)
            System.out.println("Stack Underflow ");
            return;
        }
        System.out.println("Poped info is:"+top.info);
        top=top.link;
    }
      public static void peek()
    {
        if(top==null)
            System.out.println("Stack Underflow ");
            return;
        System.out.println("Top info is:"+top.info);
    }
      public static void main(String[] args) {
            Scanner <u>sc</u>=new Scanner (System.in);
            while(true)
            System.out.println("****MENU*****");
            System.out.println("0:Exit");
            System.out.println("1:Push");
            System.out.println("2:Pop");
System.out.println("3:Peek");
            System.out.println("*********");
            System.out.println("Enter the choice");
            int choice=sc.nextInt();
            switch(choice)
            case 0:
            System.exit(0);
            case 1:
                  System.out.println("Enter the element to be pushed");
                  int x=sc.nextInt();
```

```
push(x);
break;
case 2:
    pop();
    break;
case 3:
    peek();
    break;
default:
    System.out.println("Wrong choice");
}
}
```

}