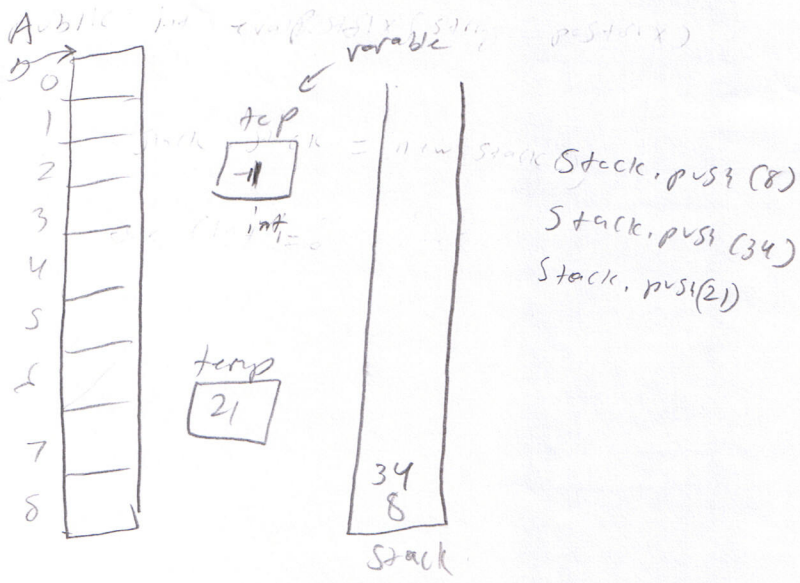


Cmp 388

①
9.10.09



Stack ADT
push()
 pop()
 top()
 is Empty()

```

public boolean is Empty()
{
    return top == -1;
}

public void push (int v)
{
    top++;
    A[top] = v;
}

public int pop()
{
    int temp = A[top];
    top--;
    return temp;
}

public int top()
{
    return A[top];
}
  
```

9.10.09



```

public class StackInt
{
    private int top = -1;
    private int[] A = new int[8];

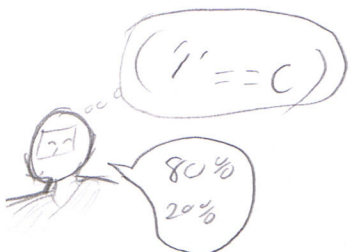
    public void push(int v)
    {
        top++;
        A[top] = v;
    }

    public int pop()
    {
        int temp = A[top];
        top--;
        return temp;
    }

    public int top()
    {
        return A[top];
    }

    public boolean isEmpty()
    {
        return top == -1;
    }
}

```



```

public class EvalPostfix
{

```

```

    public static void main(String[] args)
    {
        System.out.print(evalPostfix("3 5 + 4 5 7 - *"));
    }
    public static int evalPostfix(String postfix)
    {

```

```

    }
    public static String infixToPostfix(String infix)
    {
        Stack<Char> stack = new Stack<Char>();
        String postfix = "";
        for (int i = 0; i < infix.length(); i++)
        {
            if ((infix.charAt(i) == '(') || (infix.charAt(i) == '+') || (infix.charAt(i) == '-') || (infix.charAt(i) == '*') || (infix.charAt(i) == '/'))
            {
                stack.push(infix.charAt(i));
            }
            else if (infix.charAt(i) == ')')
            {
                while (!stack.isEmpty())
                {
                    postfix += stack.pop();
                }
            }
            else
            {
                postfix += infix.charAt(i);
            }
        }
        while (!stack.isEmpty())
        {
            postfix += stack.pop();
        }
    }
}

```

```

public static boolean isOperator(char c)
{

```

```

    return (c == '+' || c == '-' || c == '*' || c == '/' || c == '(' || c == ')');
}
public static int prec(char op)
{
    if (op == '(') return 0;
    if (op == '+') return 1;
    if (op == '-') return 1;
    if (op == '*' || op == '/') return 2;
}

```

infix = 2+3*4<70088 Fx12

