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**Question 2:**

In this function we were asked to implement the working off prefix stack. Prefix stack works by the following algorithm: 1- Put pointer at the end of end, 2- If character at pointer is an operand push it to stack, 3- If the character at pointer is an operator pop two elements from stack. Operate on them according to the operator, and push the result back to stack, 4- Decrement pointer by 1 and go to step 2 as long as there are characters left to be scanned in the expression, 5- The result is stored at the top of stack, 6- end

**Step1:**  stack s, var expression

For j=expression.size-1 j>=0 j - -

**Step2:**  If expression[j] is operand

stack.push(expression[j]-‘0’)

**Step3:**  else

Var a=stack.top

Stack.pop

Var b=stack.top

Stack.pop

**Step4:** if(expression[j])=’+’

Stack.push(a+b)

if(expression[j])=’-’

Stack.push(a-b)

if(expression[j])=’\*’

Stack.push(a\*b)

if(expression[j])=’/’

Stack.push(a/b)

**Step5:**  return stack.top

**Step6:** end