Question 1:

https://leetcode.com/problems/evaluate-reverse-polish-notation/

You are given an array of strings tokens that represents an arithmetic expression in a <u>Reverse Polish Notation</u>.

Evaluate the expression. Return an integer that represents the value of the expression. Note that:

- The valid operators are '+', '-', '*', and '/'.
- Each operand may be an integer or another expression.
- The division between two integers always truncates toward zero.
- There will not be any division by zero.
- The input represents a valid arithmetic expression in a reverse polish notation.
- The answer and all the intermediate calculations can be represented in a 32-bit integer.

My approach:

Make a stack

For every element in the vector

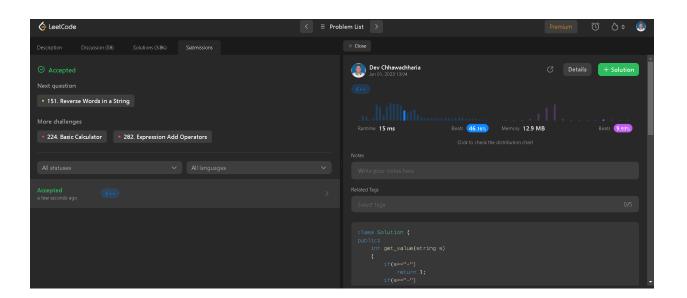
If it is a operand push it in the stack

If it is a operator:

Take out the first 2 operands.

Evaluate the result and put the result back on the stack.

Final result will be the stack top.



```
Code:-
class Solution {
public:
    int get_value(string s)
    {
```

```
if(s=="+")
     return 1;
  if(s=="-")
     return 2;
  if(s=="*")
     return 3;
  if(s=="/")
     return 4;
  return -1;
int evalRPN(vector<string>& tokens) {
  stack<string> s;
  for(int i =0;i<tokens.size();i++)</pre>
     if(tokens.at(i) == "-" || tokens.at(i) == "+" || tokens.at(i) == "*" || tokens.at(i) == "/")
        int value = get_value(tokens.at(i));
        int op1 = stoi(s.top());
        s.pop();
        int op2 = stoi(s.top());
        s.pop();
        int eval;
        switch(value)
           case 1:
             eval = op2 + op1;
             break;
          }
           case 2:
             eval = op2 - op1;
             break;
          }
           case 3:
             eval = op2 * op1;
             break;
          }
           case 4:
             eval = op2 / op1;
             break;
           }
```