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1  #include <stdio.h>
2  #include <string.h> // for strlen function
3  #include <math.h>   // for pow function
4  #include <ctype.h>  // for isdigit function
5
6  // Function to compute the result of the operator applied to two operands
7  double compute(char symbol, double op1, double op2) {
8      switch(symbol) {
9          case '+': return op1 + op2;
10         case '-': return op1 - op2;
11         case '*': return op1 * op2;
12         case '/': return op1 / op2;
13         case '$': // Could be used for exponentiation (same as ^)
14         case '^': return pow(op1, op2);
15         default: return 0; // Error case
16     }
17 }
18
19 int main() {
20     char postfix[20] = "56+437-* /"; // Example postfix expression
21     double st[20], op1, op2;
22     int top = -1, i;
23
24     // Iterate through each character in the postfix expression
25     for (i = 0; postfix[i] != '\0'; i++) {
26         if (isdigit(postfix[i])) {
27             // Push operands (digits) to the stack
28             st[++top] = postfix[i] - '0';
29         } else {
30             // Pop two operands from the stack
31             op2 = st[top--];
32             op1 = st[top--];
33             // Perform the operation and push the result back onto the stack
34             st[++top] = compute(postfix[i], op1, op2);
35         }
36     }
37
38     // The final result is the only value left in the stack
39     printf("Result is %lf\n", st[top]);
40     return 0;
41 }
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65 #include <stdio.h>
66 void hanoi(int n, char S, char T, char D) {
67     if (n == 0)
68         return;
69     hanoi(n - 1, S, D, T);
70     printf("Move disc %d from %c to %c\n", n, S, D);
71     hanoi(n - 1, T, S, D);
72 }
73
74 int main() {
75     int n;
76     printf("Enter number of discs\n");
77     scanf("%d", &n);
78     hanoi(n, 'A', 'B', 'C');
79
80     return 0;
81 }
82
```