

```

#include <stdio.h>
#include <stdlib.h>
#include <ctype.h>

#define MAX_STACK_SIZE 100

typedef struct {
    int top;
    int items[MAX_STACK_SIZE];
} Stack;

void push(Stack *s, int value) {
    if (s->top == MAX_STACK_SIZE - 1) {
        printf("Stack overflow!\n");
        exit(EXIT_FAILURE);
    }
    s->items[++(s->top)] = value;
}

int pop(Stack *s) {
    if (s->top == -1) {
        printf("Stack underflow!\n");
        exit(EXIT_FAILURE);
    }
    return s->items[(s->top)--];
}

int evaluatePostfix(char *expr) {
    Stack s;
    s.top = -1;
    int i, operand1, operand2, result;
    for (i = 0; expr[i] != '\0'; ++i) {
        if (isdigit(expr[i])) {
            push(&s, expr[i] - '0');
        } else {
            operand2 = pop(&s);
            operand1 = pop(&s);
            switch (expr[i]) {
                case '+':
                    push(&s, operand1 + operand2);
                    break;
                case '-':
                    push(&s, operand1 - operand2);
                    break;
                case '*':
                    push(&s, operand1 * operand2);
                    break;
                case '/':
                    push(&s, operand1 / operand2);
                    break;
                default:

```

```

        printf("Invalid operator!\n");
        exit(EXIT_FAILURE);
    }
}
}
result = pop(&s);
return result;
}

int main() {
    printf("K.R.Vishnu Chaithanya\n");
    printf("192372057\n");
    char expr[] = "53+2*";
    printf("Result: %d\n", evaluatePostfix(expr));
    return 0;
}

```

