

```
15. #include <stdio.h>
```

```
#include <ctype.h>
```

```
char stack[100];
```

```
int top = -1;
```

```
void push(char c) {
```

```
    stack[++top] = c;
```

```
}
```

```
char pop() {
```

```
    return stack[top--];
```

```
}
```

```
int precedence(char c) {
```

```
    if (c == '^') return 3;
```

```
    if (c == '*' || c == '/') return 2;
```

```
    if (c == '+' || c == '-') return 1;
```

```
    return 0;
```

```
}
```

```
void infixToPostfix(char* expr) {
```

```
    char *p = expr;
```

```
    while (*p) {
```

```
        if (isalnum(*p)) {
```

```

        printf("%c", *p);
    } else if (*p == '(') {
        push(*p);
    } else if (*p == ')') {
        while (stack[top] != '(')
            printf("%c", pop());
        pop(); // remove '('
    } else {
        while (top != -1 && precedence(stack[top]) >= precedence(*p))
            printf("%c", pop());
        push(*p);
    }
    p++;
}

while (top != -1)
    printf("%c", pop());
printf("\n");
}

```

```

int main() {
    char expr[] = "a+b*c";
    printf("Postfix: ");
    infixToPostfix(expr);
    return 0;
}

```

Output

Postfix: abc*+

=== Code Execution Successful ===