

```
#include <stdio.h>
#include <stdlib.h>
#include <limits.h>
```

```
int ft_strlen(char *str)
{
    int i;

    i = 0;
    while (str[i] != '\0')
        i++;
    return (i);
}
```

```
int ft_isdigit(char c)
{
    if (c >= '0' && c <= '9')
        return (1);
    return (0);
}
```

```
int is_operateur(char *str)
{
    int i;

    i = 0;
    if (str[i] == '*' || str[i] == '+' || str[i] == '-' || str[i] == '%' ||
str[i] == '/')
    {
        if (ft_isdigit(str[i + 1]) == 0)
            return (1);
    }
    return (0);
}
```

```
long *rpn_calc(char *str)
{
    long *tab;
    int i = 0;
    int j = 0;
    if (!(tab = (long*)malloc(sizeof(long) * ft_strlen(str))))
        return (NULL);
    while (str[j] != '\0')
    {
        while (is_operateur(str + i) == 0)
        {
            tab[j] = atoi(str + i);
            j++;
            while (str[j] != '\0' && str[j] != ' ')
                i++;
            if (str[i] == '\0')
            {
                printf("Error\n");
                return (NULL);
            }
            while (str[j] == ' ')
                i++;
        }
        if (j < 2)
        {
            printf("Error\n");
            return (NULL);
        }
        if (str[i] == '/')
        {
            if (tab[j - 1] == 0)
            {
                printf("Error\n");
                return (NULL);
            }
            tab[j - 2] = tab[j - 2] / tab[j - 1];
        }
        else if (str[i] == '-')
            tab[j - 2] = tab[j - 2] - tab[j - 1];
        else if (str[i] == '+')
            tab[j - 2] = tab[j - 2] + tab[j - 1];
        else if (str[i] == '*')
            tab[j - 2] = tab[j - 2] * tab[j - 1];
        else if (str[i] == '%')
        {
            if (tab[j - 1] == 0)
            {
                printf("Error\n");
                return (NULL);
            }
            tab[j - 2] = tab[j - 2] % tab[j - 1];
        }
        j--;
        i++;
        while (str[j] == ' ')
            i++;
    }
    if (j > 1)
    {
        printf("Error\n");
        return (NULL);
    }
    return (tab);
}
```

```
int main(int argc, char **argv)
{
    long *tab;

    if (argc == 2 && argv[1][0] != '\0')
    {
        tab = rpn_calc(argv[1]);
        if (tab != NULL)
            printf("%ld\n", tab[0]);
        return (0);
    }
    printf("Error\n");
    return (0);
}
```