

Результат работы программы:

The screenshot displays the OnlineGDB web interface. On the left is a blue sidebar with navigation links: 'OnlineGDB beta', 'online compiler and debugger for c/c++', 'code. compile. run. debug. share.', 'IDE', 'My Projects', 'Classroom new', 'Learn Programming', 'Programming Questions', 'Sign Up', and 'Login'. The main area is divided into two panes. The top pane shows assembly code for a file named 'main.S'. The code includes directives like '.data', '.intel_syntax noprefix', and '.text', followed by a global function 'checkMultOverflow'. The function contains assembly instructions for stack frame setup, a loop condition check, and a loop body. The bottom pane shows the execution output, indicating the program finished with exit code 0 and a result of 20.

```
1 .data
2 .intel_syntax noprefix
3 .text
4 .global checkMultOverflow
5
6 checkMultOverflow:
7     push rbp
8     mov rbp, rsp
9     mov QWORD PTR -24[rbp], rdi
10    mov DWORD PTR -28[rbp], esi
11    mov DWORD PTR -4[rbp], 2
12    jmp for1
13
14 condition:
15    mov eax, DWORD PTR -4[rbp]
16    cdqe
17    imul rax, QWORD PTR -24[rbp]
18    cmp QWORD PTR -24[rbp], rax
19    jbe _add
20    mov eax, 1
21    jmp ext1
22
23 _add:
24    add DWORD PTR -4[rbp], 1
25
26 for1:
27    mov eax, DWORD PTR -4[rbp]
28    cmp eax, DWORD PTR -28[rbp]
29    jle condition
30    mov eax, 0
31
32 ext1:
33    pop rbp
34    ret
35    .size checkMultOverflow, .-checkMultOverflow
36
37 .LC1:
```

Result (maximum argument): 20

...Program finished with exit code 0
Press ENTER to exit console.

P.S. Пока что плохо удается вручную писать программы на ассемблере, поэтому большая часть кода – копираст из disassembly кода, написанного на C.