

Лабораторная работа 3

Задание 1:

Код C++

```
#include <stdio.h>

using namespace std;

extern "C" int tass(int x);

int main()
{
    printf("x = 2 y = %d", tass(2));
    printf(" ");
    printf("x = 10 y = %d", tass(10));
    return 0;
}
```

Код ассемблер

```
.globl _tass
_tass:
    mov 4(%esp), %eax
    mov $2, %ecx
    sub %edx,%edx
    div %ecx;
    inc %eax;
    ret
```

РЕЗУЛЬТАТ

```
PS C:\Asm\3> g++ -m32 .\task1.cpp .\task1.s
.\task1.s: Assembler messages:
.\task1.s: Warning: end of file not at end of a line; newline inserted
PS C:\Asm\3> ./a
x = 2 y = 2 x = 10 y = 6
PS C:\Asm\3>
```

Задание 2:

Код

```
.data
    msg:
        .string "y = %d\n"
.globl _main
_main:
    mov $13, %eax
    mov $2, %ecx
    sub %edx,%edx
    div %ecx;
    inc %eax;
    push %eax
    push $msg
    call _printf
    add $8, %esp
    mov $0, %eax
    ret
```

РЕЗУЛЬТАТ

```
PS C:\Asm\3> g++ -m32 .\task2.s
.\task2.s: Assembler messages:
.\task2.s: Warning: end of file not at end of a line; newline inserted
PS C:\Asm\3> ./a
y = 7
```

Задание 3:

Код C++

```
#include <stdio.h>

using namespace std;

extern "C" void fun(int x, int y)
```

```
{  
    printf("x = %d y = %d\n", x, y);  
}
```

Код ассемблер

```
.data  
  
x: .int 10  
y: .int 13  
  
.global _main  
  
_main:  
    pushl x  
    pushl y  
    call _fun  
    addl $3*4, %esp  
    xor %eax, %eax  
    ret
```

РЕЗУЛЬТАТ

```
PS C:\Asm\3> g++ -m32 .\task3.s .\task3.cpp  
.\task3.s: Assembler messages:  
.\task3.s: Warning: end of file not at end of a line; newline inserted  
PS C:\Asm\3> ./a  
x = 13 y = 10
```