

-

lab04

:

: -02-23

1

- 1.
- 2.
- 3.
- 4.

2

, NASM.

3

- 1.

mkdir

NASM(.1).

```
[mdyanushkevich@fedora ~]$ mkdir -p ~/work/a  
[mdyanushkevich@fedora ~]$ cd ~/work/arch-po
```

- 2.

hello.asm(.2).
touch

```
[mdyanushkevich@fedora lab04]$ touch hello.asm  
[mdyanushkevich@fedora lab04]$ gedit hello.asm
```

gedit.

```

SECTION .data
    hello:          DB 'Hello world!' ,10

    helloLen:       EQU $-hello

SECTION .text
    GLOBAL _start

_start:
    mov eax,4
    mov ebx,1
    mov ecx,hello
    mov edx,helloLen
    int 80h

    mov eax,1
    mov ebx,0
    int 80h

```

3. (.3).

gedit

4. (.4).

```
[mdyanushkevich@fedora lab04]$ nasm -f elf hello.asm
```

hello.o.

5. (.5).

```
[mdyanushkevich@fedora lab04]$ nasm -o obj.o -f elf -g -l list.lst hello.asm
```

6. (.6).

ls

```
[mdyanushkevich@fedora lab04]$ ls
hello.asm hello.o list.lst obj.o
[mdyanushkevich@fedora lab04]$
```

7. (.7).

```
[mdyanushkevich@fedora lab04]$ ld -m elf_i386 hello.o -o hello
[mdyanushkevich@fedora lab04]$ ls
hello hello.asm hello.o list.lst obj.o
```

ls

8. (.8).

```
[mdyanushkevich@fedora lab04]$ ld -m elf_i386 obj.o -o main
[mdyanushkevich@fedora lab04]$ ld --help
Использование ld [параметры] файл...
Параметры:
  -a КЛЮЧЕВОЕ СЛОВО
                        Управление общей библиотекой для совместимости с HP/UX
  -A АРХИТЕКТУРА, --architecture АРХИТЕКТУРА
```

9. (.9).

```
[mdyanushkevich@fedora lab04]$ ./hello
Hello world!
[mdyanushkevich@fedora lab04]$
```

4

1. lab04 cp hello.asm lab4.asm(.10).

```
[mdyanushkevich@fedora lab04]$ cp hello.asm lab4.asm
[mdyanushkevich@fedora lab04]$ ls
hello hello.asm hello.o lab4.asm list.lst main obj.o
[mdyanushkevich@fedora lab04]$ gedit lab4.asm
```

cp lab4.asm, gedit.

```
SECTION .data
    hello:      DB 'Янушкевич Михаил!',1

    helloLen:   EQU $-hello

SECTION .text
    GLOBAL _start

_start:

    mov eax,4
    mov ebx,1
    mov ecx,hello
    mov edx,helloLen
    int 80h

    mov eax,1
    mov ebx,0
    int 80h
```

2. lab4.asm (.11).
 , “Hello world!” “ ”.

3. , (.12).

```
[mdyanushkevich@fedora lab04]$ nasm -f elf lab4.asm
[mdyanushkevich@fedora lab04]$ nasm -o obj.o -f elf -g -l list.lst lab4.asm
[mdyanushkevich@fedora lab04]$ ld -m elf_i386 lab4.o -o lab4
[mdyanushkevich@fedora lab04]$ ld -m elf_i386 obj.o -o main
[mdyanushkevich@fedora lab04]$ ./lab4
Янушкевич Михаил!
```

4. hello.asm lab4.asm (.13).
 cp hello.asm lab4.asm

```
[mdyanushkevich@fedora lab04]$ cp hello.asm ~/work/study/2023-2024/"Архитектура кода"
[mdyanushkevich@fedora lab04]$ cp lab4.asm ~/work/study/2023-2024/"Архитектура кода"
[mdyanushkevich@fedora lab04]$ cd ~/work/study/2023-2024/"Архитектура кода"
[mdyanushkevich@fedora lab04]$ ls
hello.asm lab4.asm presentation report
```

5. Github(.14). [mdyanushkevich@fedora arch-pc]\$ git push
 git push Github.

6. , Github(.15).

5

Name	Last commit message	Last commit
..		
presentation	feat(main): make course structure	last m
report	feat(main): make course structure	last m
hello.asm	feat(main): make course structure	last
lab4.asm	feat(main): make course structure	last

NASM,

Linux.