

שאלה 1_4 - שימוש בכלים שנלמדו בתרגול 2:

file:

```
user@user-VirtualBox:~/Desktop/ex1/task_a$ file main1_3
main1_3: ELF 64-bit LSB shared object, x86-64, version 1 (SYSV), dynamically linked, interpreter /lib64/ld-linux-x86-64.so.2, BuildID[sha1]=f577a59562c7add90d257d40acc06d18f13ee42f, for GNU/Linux 3.2.0, with debug_info, not stripped
user@user-VirtualBox:~/Desktop/ex1/task_a$ file libhello_ariel.so
libhello_ariel.so: ELF 64-bit LSB shared object, x86-64, version 1 (SYSV), dynamically linked, BuildID[sha1]=fd9c21ee7b5cd35afb8ad26fb7022cb8f4ef0e6d, with debug info, not stripped
```

nm:

```
user@user-VirtualBox:~/Desktop/ex1/task_a$ nm libhello_ariel.so
0000000000004028 b completed.8060
                 w __cxa_finalize@@GLIBC_2.2.5
0000000000001060 t deregister_tm_clones
00000000000010d0 t __do_global_ctors_aux
0000000000003e18 d __do_global_ctors_aux_fini_array_entry
0000000000004020 d __dso_handle
0000000000003e20 d __DYNAMIC
0000000000001130 t __fini
0000000000001110 t frame_dummy
0000000000003e10 d __frame_dummy_init_array_entry
00000000000020c8 r __FRAME_END__
0000000000004000 d _GLOBAL_OFFSET_TABLE_
                 w __gmon_start__
000000000000200c r __GNU_EH_FRAME_HDR
0000000000001119 T hello_ariel
0000000000001000 t _init
                 w _ITM_deregisterTMCloneTable
                 w _ITM_registerTMCloneTable
                 U puts@@GLIBC_2.2.5
0000000000001090 t register_tm_clones
0000000000004028 d __TMC_END__
```

ldd:

```
user@user-VirtualBox:~/Desktop/ex1/task_a$ ldd main1_1
linux-vdso.so.1 (0x00007fff5459f000)
libc.so.6 => /lib/x86_64-linux-gnu/libc.so.6 (0x00007f5604563000)
/lib64/ld-linux-x86-64.so.2 (0x00007f560476c000)
user@user-VirtualBox:~/Desktop/ex1/task_a$ ldd main1_3
linux-vdso.so.1 (0x00007ffd175be000)
libdl.so.2 => /lib/x86_64-linux-gnu/libdl.so.2 (0x00007f7f5dfce000)
libc.so.6 => /lib/x86_64-linux-gnu/libc.so.6 (0x00007f7f5dddc000)
/lib64/ld-linux-x86-64.so.2 (0x00007f7f5dfeb000)
```

```
user@user-VirtualBox:~/Desktop/ex1/task_a$ ltrace ./main1_1
hello ariel
+++ exited (status 0) +++
```

[illegible]