

Όνομα                      ΣΤΑΥΡΙΝΑΚΗΣ ΠΑΝΑΓΙΩΤΗΣ  
ΑΜ                              6217

### Ερώτημα Α

#### *Λίστα τροποποιηθέντων αρχείων*

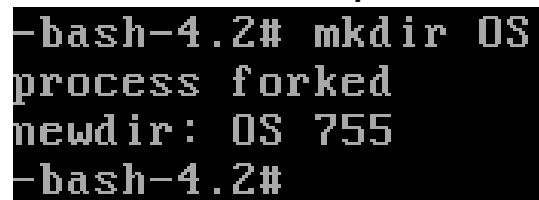
/usr/src/servers/vfs/open.c

#### *Τροποποιήσεις*

/usr/src/servers/vfs/open.c

Line	Code
611	printf("newdir: %s %o\n",fullpath, dirmode);

#### *Screenshots αποτελεσμάτων*



```
-bash-4.2# mkdir OS
process forked
newdir: OS 755
-bash-4.2#
```

## Ερώτημα Β

### *Λίστα τροποποιηθέντων αρχείων*

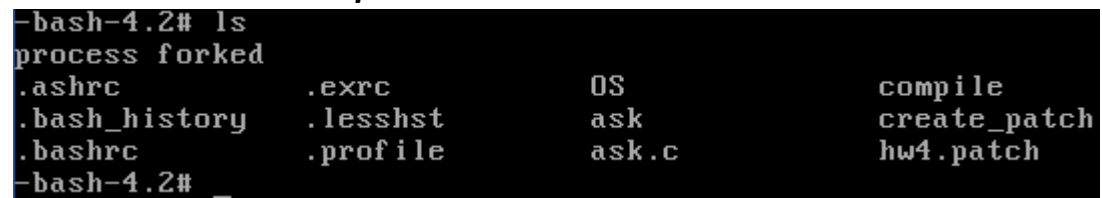
/usr/src/kernel/system/do\_fork.c

### *Τροποποιήσεις*

/usr/src/kernel/system/do\_fork.c

Line	Code
125	printf("process forked\n");

### *Screenshots αποτελεσμάτων*



```
-bash-4.2# ls
process forked
.ashrc          .exrc          OS             compile
.bash_history  .lessht       ask            create_patch
.bashrc        .profile      ask.c          hw4.patch
-bash-4.2#
```

## Ερώτημα C

### *Λίστα τροποποιηθέντων αρχείων*

```
/usr/src/servers/pm/table.c  
/usr/src/include/minix/callnr.h  
/usr/src/servers/pm/proto.h  
/usr/src/servers/pm/do_erotimac.c  
/usr/src/servers/pm/Makefile  
/root/ask.c
```

### *Τροποποιήσεις*

```
/usr/src/servers/pm/table.c
```

Line	Code
83	do_erotimac, /* 69 = erotimac */

```
/usr/src/include/minix/callnr.h
```

Line	Code
68	#define EROTIMAC 69

```
/usr/src/servers/pm/proto.h
```

Line	Code
59	int do_erotimac(void);

```
/usr/src/servers/pm/do_erotimac.c
```

Line	Code
1	#include "pm.h"
2	#include "mproc.h"
4	int do_erotimac(){
5	clock_t user_t=0;
6	clock_t system_t=0;
7	printf("processes -> %d\n",procs_in_use);
8	for (int i=0; i<NR_PROCS; i++)
9	{

```

10      user_t=mproc[i].mp_child_utime+user_t;
11      system_t=mproc[i].mp_child_stime+system_t;
12      }
13      printf("user time -> %d\n", (int)user_t);
14      printf("system time -> %d\n", (int)system_t);
15      return 0;
16      }

```

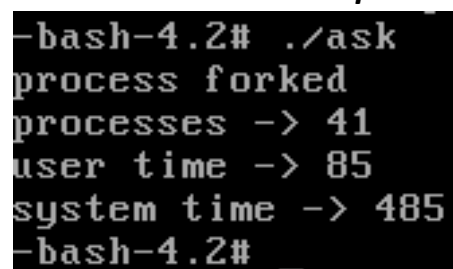
/usr/src/servers/pm/Makefile

Line	Code
7	profile.c schedule.c do_erotimac.c

/root/ask.c

Line	Code
1	#include <lib.h>
2	#include <stdio.h>
4	int main(void) {
5	message m;
6	_syscall(PM_PROC_NR, 69, &m);
7	}

### ***Screenshots αποτελεσμάτων***



```

-bash-4.2# ./ask
process forked
processes -> 41
user time -> 85
system time -> 485
-bash-4.2#

```

## Ερώτημα D

### *Λίστα τροποποιηθέντων αρχείων*

```
/usr/src/servers/pm/table.c  
/usr/src/include/minix/callnr.h  
/usr/src/servers/pm/proto.h  
/usr/src/servers/pm/do_erotimad.c  
/usr/src/servers/pm/Makefile  
/root/ask2.c
```

### *Τροποποιήσεις*

```
/usr/src/servers/pm/table.c
```

Line	Code
84	do_erotimad, /* 70 = erotimad */

```
/usr/src/include/minix/callnr.h
```

Line	Code
69	#define EROTIMAD 70

```
/usr/src/servers/pm/proto.h
```

Line	Code
60	int do_erotimad(int par);

```
/usr/src/servers/pm/do_erotimad.c
```

Line	Code
1	#include "pm.h"
2	#include "mproc.h"
4	int do_erotimad(int par){
5	for(int i=0; i<NR_PROCS; i++)
6	{
7	if(mproc[i].mp_pid==par) return 1;
8	else if(i==(NR_PROCS-1)) return 0;
9	}

10            }

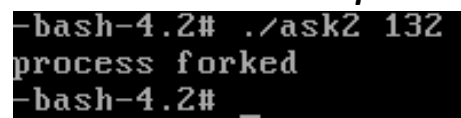
/usr/src/servers/pm/Makefile

Line	Code
7	profile.c schedule.c do_erotimac.c do_erotimad.c

/root/ask2.c

Line	Code
1	#include <lib.h>
2	#include <stdio.h>
4	int main(void) {
5	message m;
6	_syscall(PM_PROC_NR, 70, &m);
7	}

### ***Screenshots αποτελεσμάτων***



```
-bash-4.2# ./ask2 132
process forked
-bash-4.2#
```