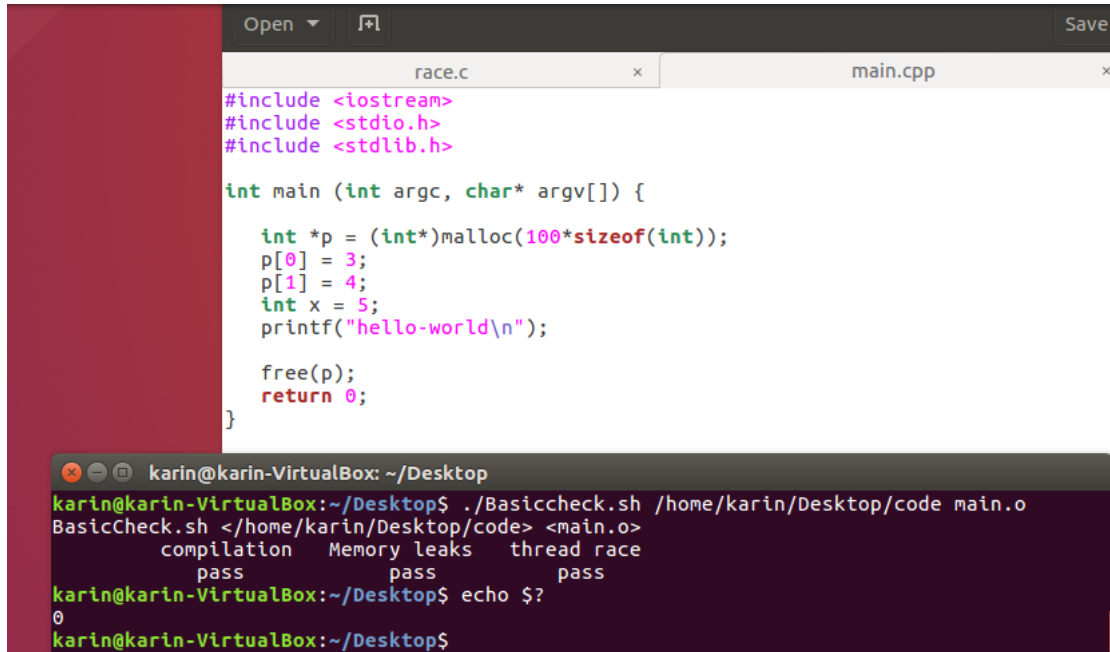


מטלה 1 - תכנות בסיסי בלינוקס

מגישות: קארין אהרון 312502537

אורנית כהן 313340267

1. הצלחה של הכל (0) -



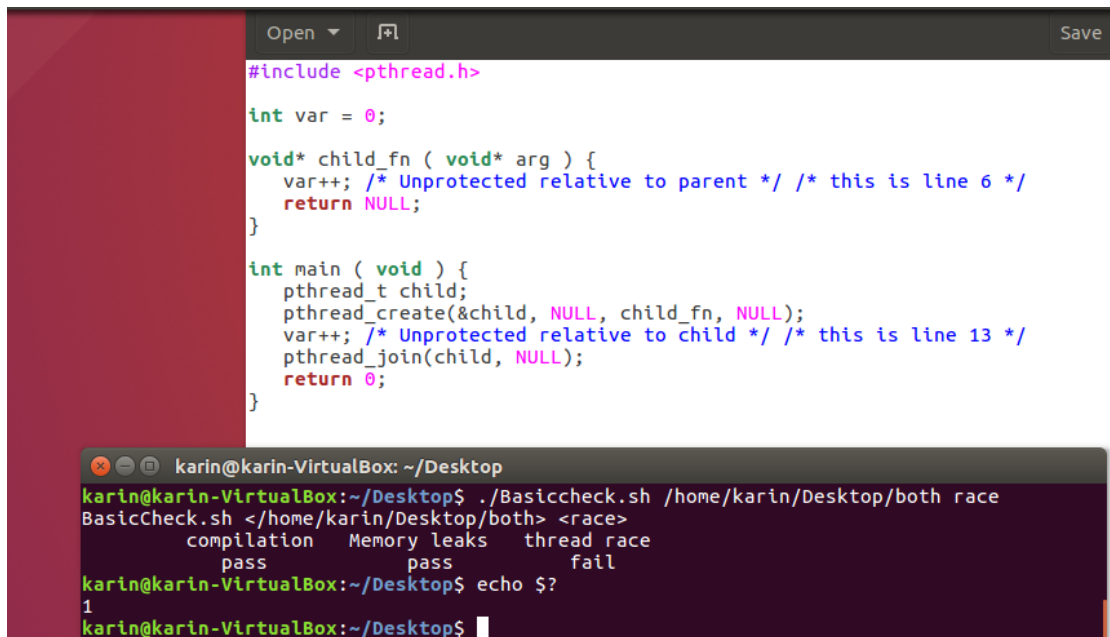
```
Open  Save
race.c  main.cpp
#include <iostream>
#include <stdio.h>
#include <stdlib.h>

int main (int argc, char* argv[]) {
    int *p = (int*)malloc(100*sizeof(int));
    p[0] = 3;
    p[1] = 4;
    int x = 5;
    printf("hello-world\n");

    free(p);
    return 0;
}

karin@karin-VirtualBox: ~/Desktop
karin@karin-VirtualBox:~/Desktop$ ./Basiccheck.sh /home/karin/Desktop/code main.o
BasicCheck.sh </home/karin/Desktop/code> <main.o>
      compilation  Memory leaks  thread race
      pass         pass         pass
karin@karin-VirtualBox:~/Desktop$ echo $?
0
karin@karin-VirtualBox:~/Desktop$
```

2. שגיאת מרוצי תהליכונים (1) -



```
Open  Save
#include <pthread.h>

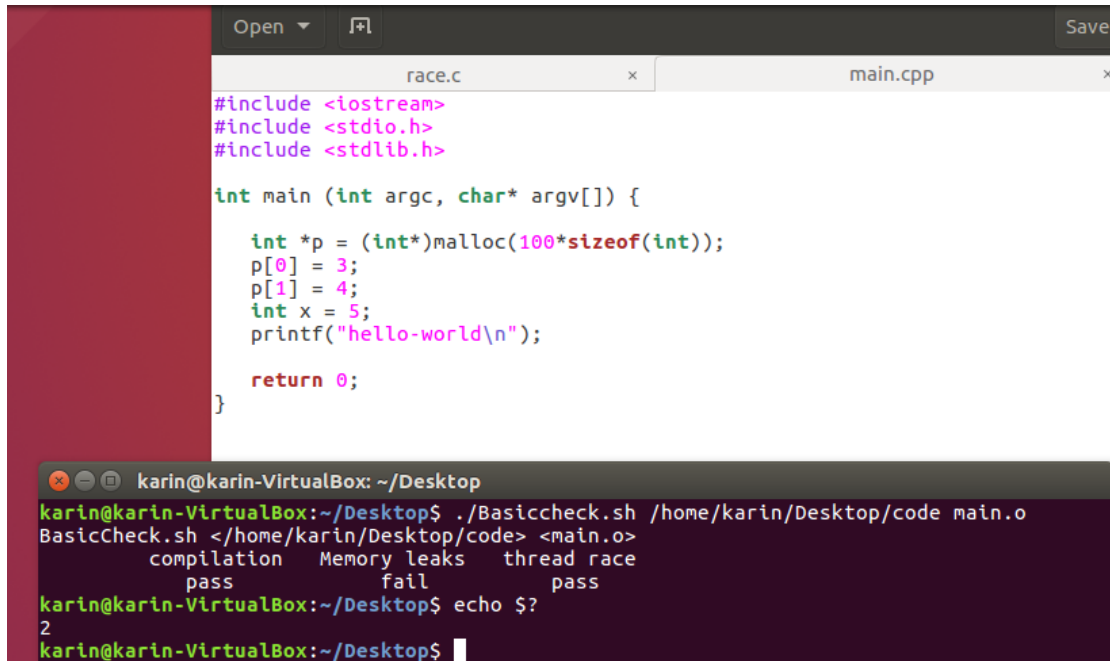
int var = 0;

void* child_fn ( void* arg ) {
    var++; /* Unprotected relative to parent */ /* this is line 6 */
    return NULL;
}

int main ( void ) {
    pthread_t child;
    pthread_create(&child, NULL, child_fn, NULL);
    var++; /* Unprotected relative to child */ /* this is line 13 */
    pthread_join(child, NULL);
    return 0;
}

karin@karin-VirtualBox: ~/Desktop
karin@karin-VirtualBox:~/Desktop$ ./Basiccheck.sh /home/karin/Desktop/both race
BasicCheck.sh </home/karin/Desktop/both> <race>
      compilation  Memory leaks  thread race
      pass         pass         fail
karin@karin-VirtualBox:~/Desktop$ echo $?
1
karin@karin-VirtualBox:~/Desktop$
```

3. זליגת זיכרון (2) -



The screenshot shows a code editor with two tabs: 'race.c' and 'main.cpp'. The 'race.c' tab is active, displaying the following C code:

```
#include <iostream>
#include <stdio.h>
#include <stdlib.h>

int main (int argc, char* argv[]) {

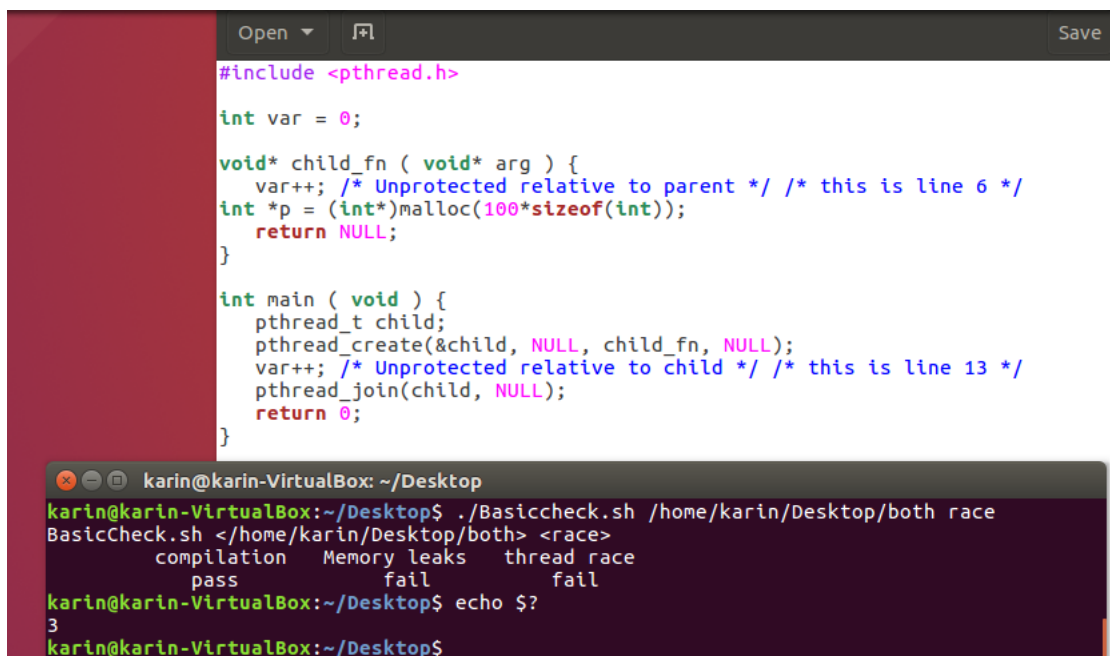
    int *p = (int*)malloc(100*sizeof(int));
    p[0] = 3;
    p[1] = 4;
    int x = 5;
    printf("hello-world\n");

    return 0;
}
```

Below the code editor is a terminal window with the following output:

```
karin@karin-VirtualBox: ~/Desktop
karin@karin-VirtualBox:~/Desktop$ ./Basiccheck.sh /home/karin/Desktop/code main.o
BasicCheck.sh </home/karin/Desktop/code> <main.o>
      compilation  Memory leaks  thread race
      pass         fail         pass
karin@karin-VirtualBox:~/Desktop$ echo $?
2
karin@karin-VirtualBox:~/Desktop$
```

4. שגיאת זליגת זיכרון ושגיאת מרוצי תהליכונים (3) -



The screenshot shows a code editor with a single tab displaying the following C code:

```
#include <pthread.h>

int var = 0;

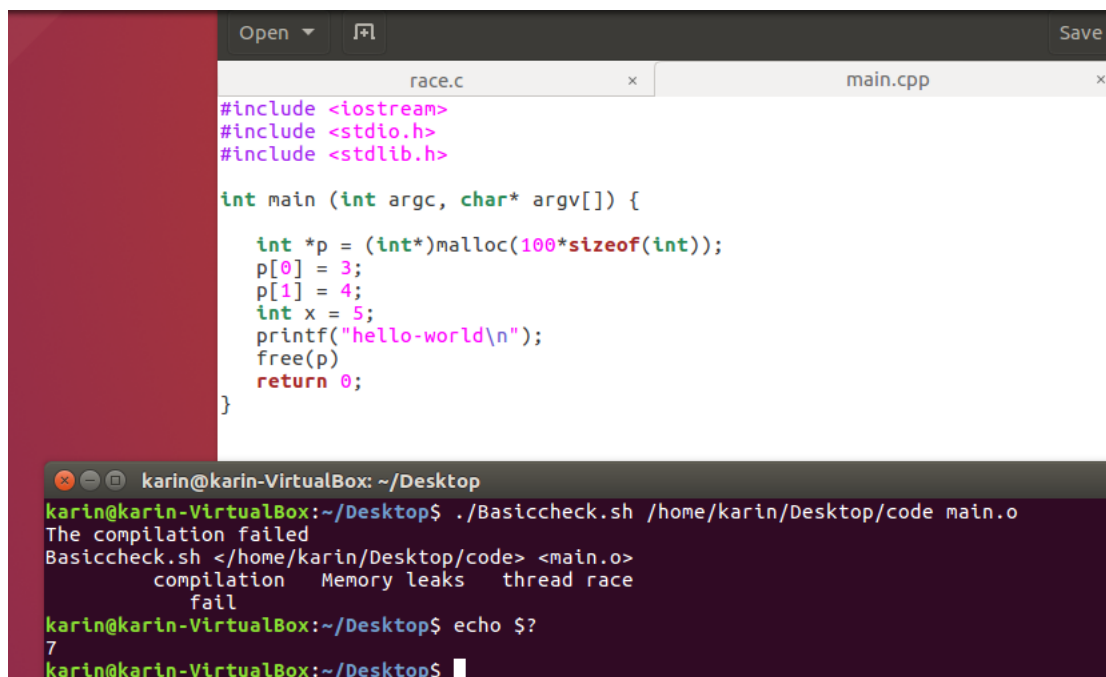
void* child_fn ( void* arg ) {
    var++; /* Unprotected relative to parent */ /* this is line 6 */
    int *p = (int*)malloc(100*sizeof(int));
    return NULL;
}

int main ( void ) {
    pthread_t child;
    pthread_create(&child, NULL, child_fn, NULL);
    var++; /* Unprotected relative to child */ /* this is line 13 */
    pthread_join(child, NULL);
    return 0;
}
```

Below the code editor is a terminal window with the following output:

```
karin@karin-VirtualBox: ~/Desktop
karin@karin-VirtualBox:~/Desktop$ ./Basiccheck.sh /home/karin/Desktop/both race
BasicCheck.sh </home/karin/Desktop/both> <race>
      compilation  Memory leaks  thread race
      pass         fail         fail
karin@karin-VirtualBox:~/Desktop$ echo $?
3
karin@karin-VirtualBox:~/Desktop$
```

5. שגיאת קומפילציה (7) -



The screenshot shows a code editor with two tabs: 'race.c' and 'main.cpp'. The 'main.cpp' tab is active, displaying the following C++ code:

```
#include <iostream>
#include <stdio.h>
#include <stdlib.h>

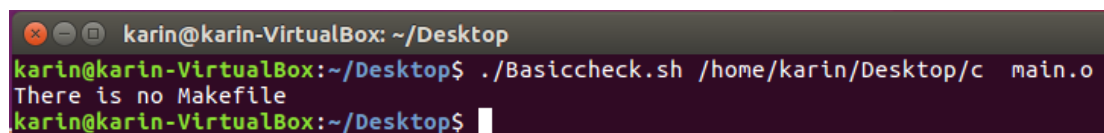
int main (int argc, char* argv[]) {

    int *p = (int*)malloc(100*sizeof(int));
    p[0] = 3;
    p[1] = 4;
    int x = 5;
    printf("hello-world\n");
    free(p)
    return 0;
}
```

Below the code editor is a terminal window with the following output:

```
karin@karin-VirtualBox: ~/Desktop
karin@karin-VirtualBox:~/Desktop$ ./Basiccheck.sh /home/karin/Desktop/code main.o
The compilation failed
Basiccheck.sh </home/karin/Desktop/code> <main.o>
      compilation  Memory leaks  thread race
      fail
karin@karin-VirtualBox:~/Desktop$ echo $?
7
karin@karin-VirtualBox:~/Desktop$
```

6. אין Makefile -



The screenshot shows a terminal window with the following output:

```
karin@karin-VirtualBox: ~/Desktop
karin@karin-VirtualBox:~/Desktop$ ./Basiccheck.sh /home/karin/Desktop/c main.o
There is no Makefile
karin@karin-VirtualBox:~/Desktop$
```