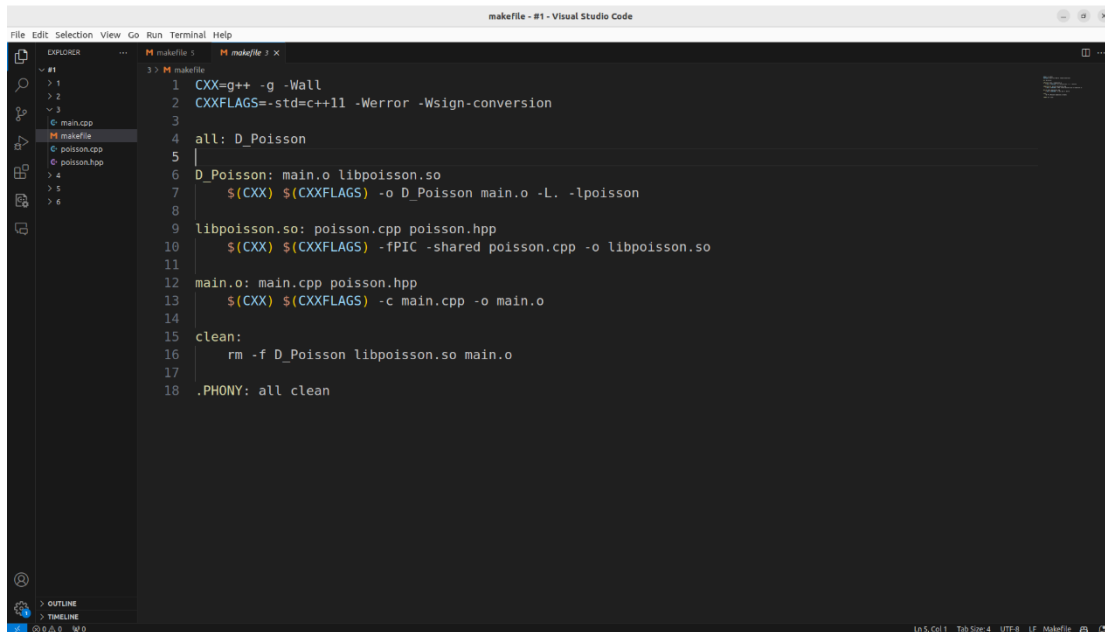


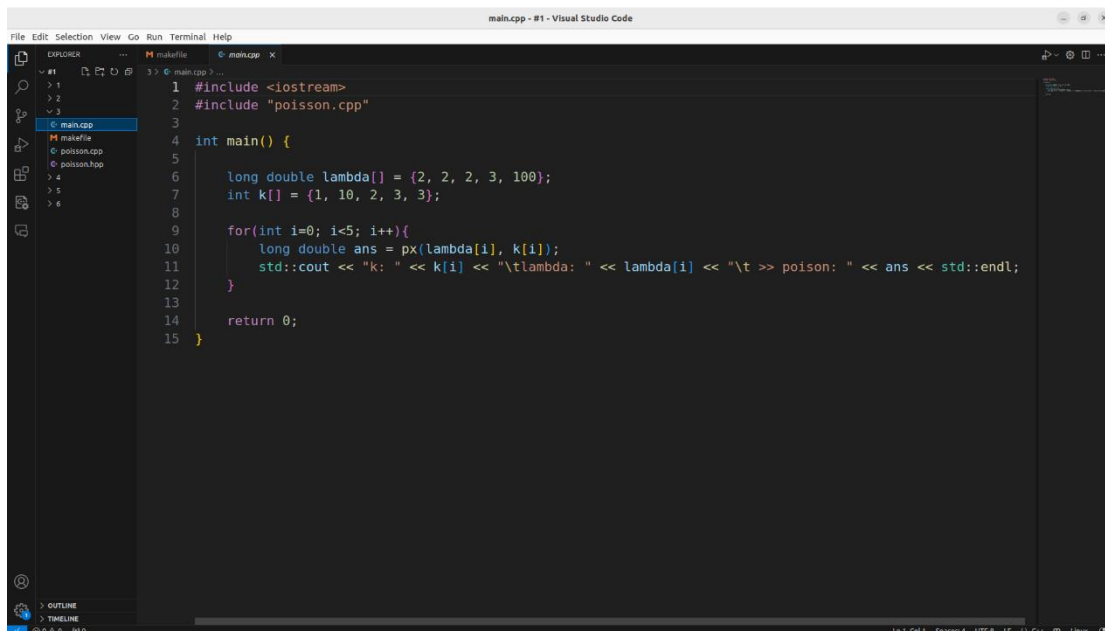
## תרגיל 3 – ספרייה דינאמית

מייקפיל:



```
1 CXX=g++ -g -Wall
2 CXXFLAGS=-std=c++11 -Werror -Wsign-conversion
3
4 all: D_Poisson
5
6 D_Poisson: main.o libpoisson.so
7     $(CXX) $(CXXFLAGS) -o D_Poisson main.o -L. -lpoisson
8
9 libpoisson.so: poisson.cpp poisson.hpp
10    $(CXX) $(CXXFLAGS) -fPIC -shared poisson.cpp -o libpoisson.so
11
12 main.o: main.cpp poisson.hpp
13    $(CXX) $(CXXFLAGS) -c main.cpp -o main.o
14
15 clean:
16     rm -f D_Poisson libpoisson.so main.o
17
18 .PHONY: all clean
```

:main



```
1 #include <iostream>
2 #include "poisson.cpp"
3
4 int main() {
5
6     long double lambda[] = {2, 2, 2, 3, 100};
7     int k[] = {1, 10, 2, 3, 3};
8
9     for(int i=0; i<5; i++){
10         long double ans = px(lambda[i], k[i]);
11         std::cout << "k: " << k[i] << "\tlambda: " << lambda[i] << "\t >> poison: " << ans << std::endl;
12     }
13
14     return 0;
15 }
```

## דוגמת הרצה:

```
omer@Linux-Omer: ~/Desktop/Operating systems/#1/3$ make
g++ -g -Wall -std=c++11 -Werror -Wsign-conversion -c main.cpp -o main.o
g++ -g -Wall -std=c++11 -Werror -Wsign-conversion -fPIC -shared poisson.cpp -o libpoisson.so
g++ -g -Wall -std=c++11 -Werror -Wsign-conversion -o D_Poisson main.o -L. -lpoisson
omer@Linux-Omer:~/Desktop/Operating systems/#1/3$ ls
D_Poisson  libpoisson.so  main.cpp  main.o  makefile  poisson.cpp  poisson.hpp
omer@Linux-Omer:~/Desktop/Operating systems/#1/3$ ./D_Poisson
k: 1  lambda: 2      >> poison: 0.270671
k: 10 lambda: 2      >> poison: 3.81899e-05
k: 2  lambda: 2      >> poison: 0.270671
k: 3  lambda: 3      >> poison: 0.224042
k: 3  lambda: 100    >> poison: 6.30584e-39
omer@Linux-Omer:~/Desktop/Operating systems/#1/3$
```