

Предмет	ТРПО
Курс	4
Семестр	1
Работа	11
Дата	27.11.2020
Группа	473
Фамилия	Студентова
Имя	Варя
Отчество	Олеговна

Отчет

Написанный код на lua (Рис.1).

The screenshot shows a QEMU virtual machine window titled 'QEMU'. Inside, a 'Text Editor' window is open, displaying a file named 'clua.lua' located at '~/Studentova473'. The code is written in Lua and defines a function 'run' that calculates the sum of three local variables 'a', 'b', and 'c' using a function 'solve_eq'. The code is as follows:

```

1
2 function run ()
3
4     local a = 2
5     local b = 4
6     local c = 1
7
8     local x1, x2 = solve_eq(a, b, c)
9
10    print (x1, x2)
11
12 end
13 -- Studentova_473

```

The left sidebar of the text editor shows a 'Functions' panel with 'run [2]' listed. At the bottom of the window, a terminal is open, showing the prompt 'user@debian:~\$'. The status bar at the very bottom indicates 'Bracket match found on line: 10', 'Lua', 'Tab Width: 4', and 'Ln 10, Col 19'.

Рис-1

Код на С.(Рис.2-3)

The screenshot shows a QEMU virtual machine window titled 'QEMU'. Inside, there is a 'Text Editor' window with the filename 'clua.c' and the path '~/Studentova473'. The editor contains C code for solving quadratic equations. A sidebar on the left shows a project structure with 'Functions', 'main [36]', and 'my_solve_eq [6]'. At the bottom, a 'Terminal' window shows the prompt 'user@debian:~\$'.

```
1 #include <math.h>
2 #include <lua.h>
3 #include <luaolib.h>
4 #include <luauxlib.h>
5
6 static int my_solve_eq(lua_State *l)
7 {
8     float a = (float) luaL_checknumber(l, 1);
9     float b = (float) luaL_checknumber(l, 2);
10    float c = (float) luaL_checknumber(l, 3);
11
12    float d = b * b - 4.0f * a * c;
13    if (d < 0)
14    {
15        lua_pushnil(l);
16        lua_pushnil(l);
17    }
18    else if (d > 0)
19        //Studentova_473
20    {
21        float x1 = (-b - sqrtf(d)) / (2.0f * a);
22        float x2 = (-b + sqrtf(d)) / (2.0f * a);
23        lua_pushnumber(l, x1);
24        lua_pushnumber(l, x2);
25    }
26    else
27    {
28        float x = (-b + sqrtf(d)) / (2.0f * a);
29        lua_pushnumber(l, x);
30        lua_pushnil(l);
31    }
32}
```

user@debian:~\$

Terminal

C Tab Width: 4 Ln 41 Col 24

Рис-2

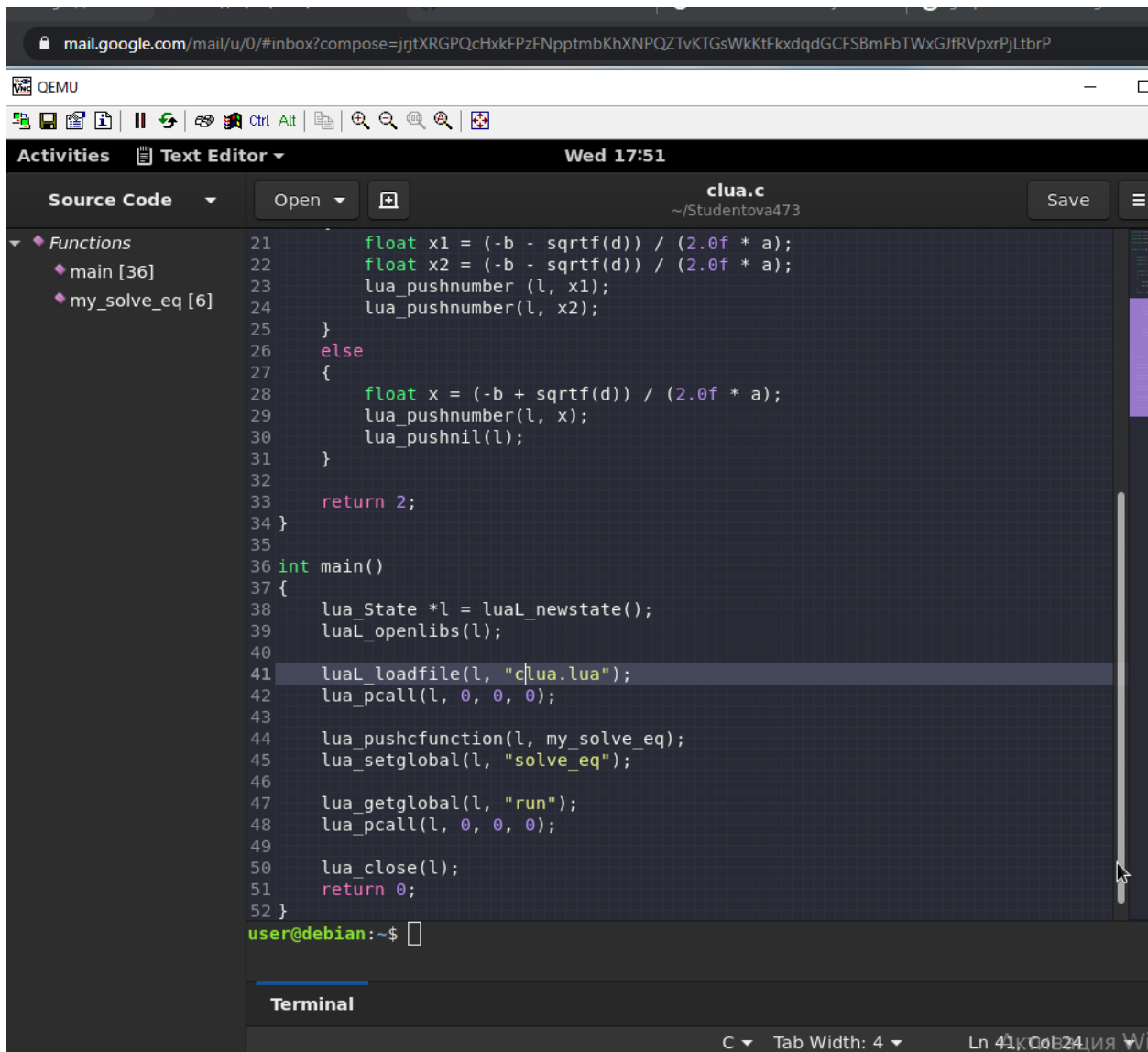
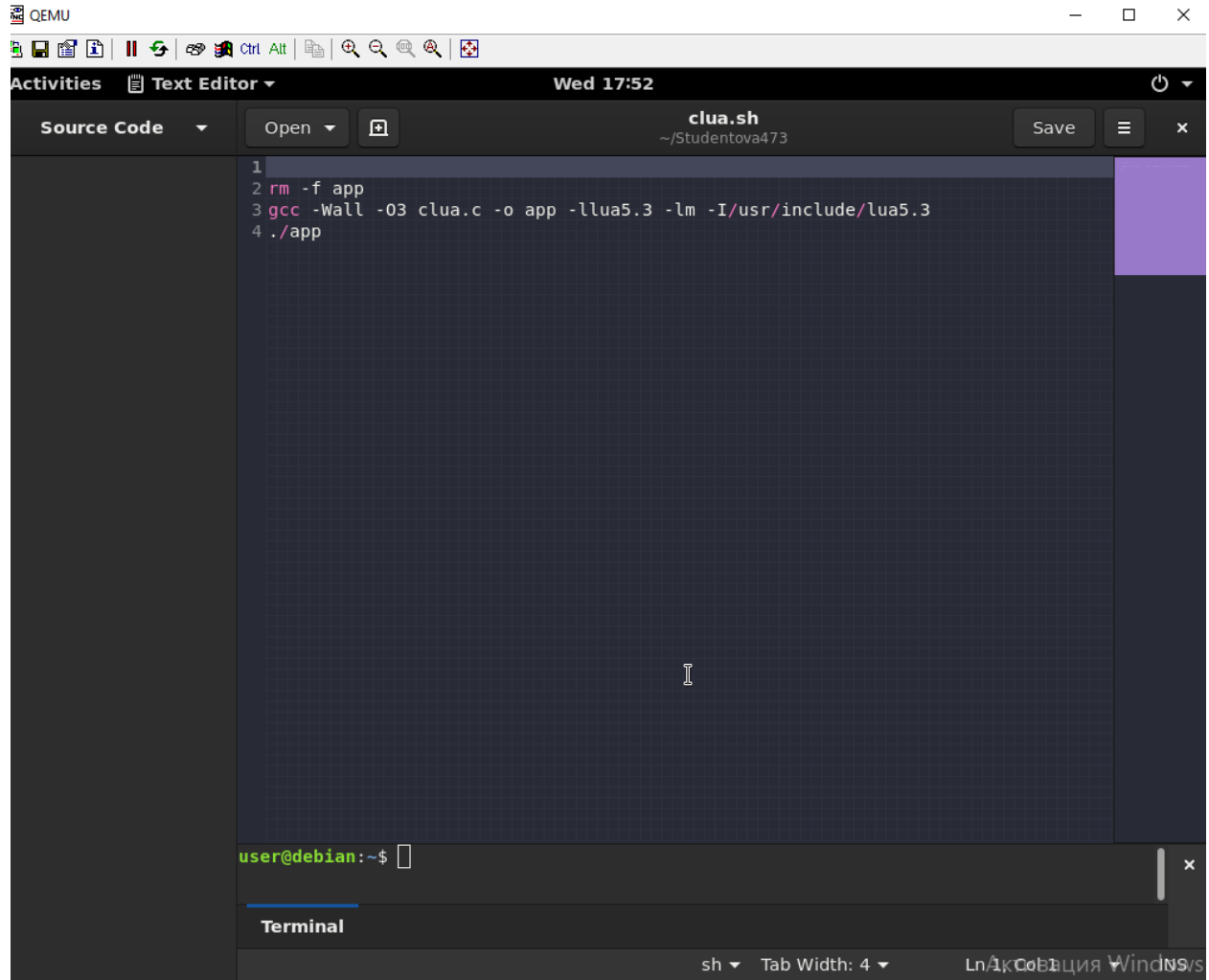


Рис-3

Код на power shell.(Рис.-4)



The image shows a QEMU virtual machine window. The main area is a text editor titled 'clua.sh' with the path '~/Studentova473'. It contains four lines of code:

```
1  
2 rm -f app  
3 gcc -Wall -O3 clua.c -o app -llua5.3 -lm -I/usr/include/lua5.3  
4 ./app
```

Below the text editor is a terminal window with the prompt 'user@debian:~\$'. The terminal is currently empty. The bottom status bar shows 'sh', 'Tab Width: 4', and 'Ln 1, Col 1, Window 1/1'.

Рис-4

Работа приложения.(Рис.-7)

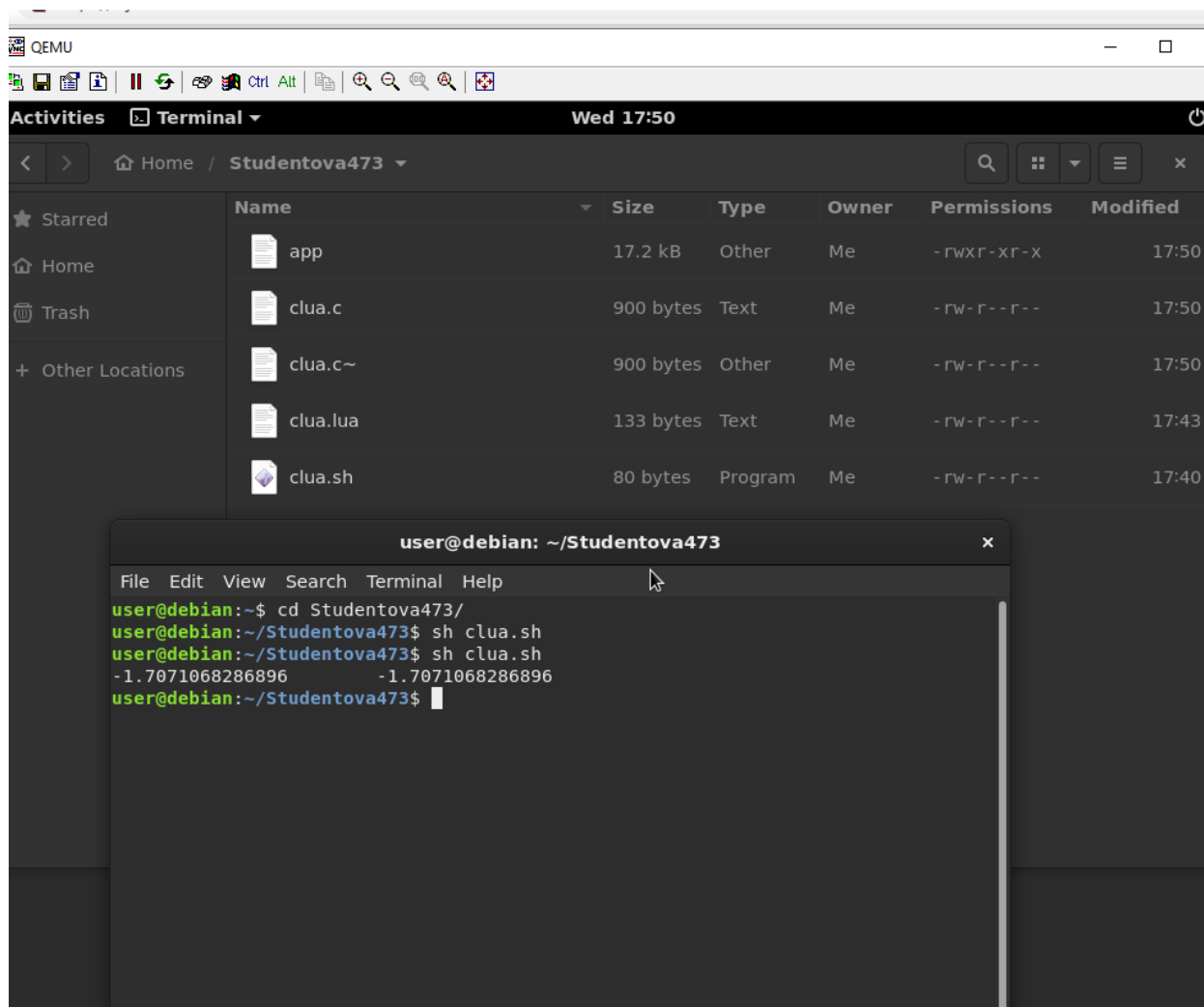


Рис-7

