

Московский Авиационный Институт  
(Национальный Исследовательский Университет)  
Институт №8 “Компьютерные науки и прикладная математика”  
Кафедра №806 “Вычислительная математика и программирование”

**Лабораторная работа №5-7 по курсу**  
**«Операционные системы»**

Группа: М80-206Б-22

Студент: Жаднов М. Д.

Преподаватель: Миронов Е.С.

Оценка: \_\_\_\_\_

Дата: 04.01.24

Москва, 2024

## Постановка задачи

### Вариант 45.

Топология 4, набор команд 2, проверка доступности узла 2.

## Общий метод и алгоритм решения

Программа состоит из нескольких компонентов, включая вычислительные, управляющие узлы и структуру клиент-серверной архитектуры. При создании нового вычислительного узла, который будет добавлен в дерево, будет запущен новый процесс. Взаимодействие между узлами будет осуществляться с использованием брокера сообщений, в данном случае - zero message queue. Будет разработан интерфейс командной строки для интерактивного общения с пользователем. При удалении узла будут также удалены все его потомки.

## Код программы

### ze\_mes\_queue.h

```
#pragma once
#include <zmq.hpp>
#include <iostream>
#include <string>
```

```
const int MAIN_PORT = 4040;
```

```
void send_message(zmq::socket_t &socket, const std::string &msg) {
    zmq::message_t message(msg.size());
    memcpy(message.data(), msg.c_str(), msg.size());
    socket.send(message);
}
```

```
std::string receive_message(zmq::socket_t &socket) {
    zmq::message_t message;
    int chars_read;
    try {
        chars_read = (int)socket.recv(&message);
    }
    catch (...) {
        chars_read = 0;
    }
    if (chars_read == 0) {
        throw -1;
    }
    std::string received_msg(static_cast<char*>(message.data()), message.size());
    return received_msg;
}
```

```

void connect(zmq::socket_t &socket, int port) {
std::string address = "tcp://127.0.0.1:" + std::to_string(port);
socket.connect(address);
}

```

```

void disconnect(zmq::socket_t &socket, int port) {
std::string address = "tcp://127.0.0.1:" + std::to_string(port);
socket.disconnect(address);
}

```

```

int bind(zmq::socket_t &socket, int id) {
int port = MAIN_PORT + id;
std::string address = "tcp://127.0.0.1:" + std::to_string(port);
while(true){
try{
socket.bind(address);
break;
}
catch(...){
port++;
}
}
return port;
}

```

```

void unbind(zmq::socket_t &socket, int port) {
std::string address = "tcp://127.0.0.1:" + std::to_string(port);
socket.unbind(address);
}

```

## **tree.h**

```

#pragma once
#include <iostream>
#include <vector>
#include <set>
#include <algorithm>

```

```

class Tree{
struct Node{
int id;
bool available;
Node* left, *right;

```

```

Node(int i): id(i), available(true), left(nullptr), right(nullptr){}
~Node(){}

```

```

void findRemove(int idElem, std::set<int> &ids){
    if(left != nullptr && left->id == idElem){
        left->removeChilds(ids);
        ids.erase(left->id);
        delete left;
        left = nullptr;
    }
    else if(right != nullptr && right->id == idElem){
        right->removeChilds(ids);
        ids.erase(right->id);
        delete right;
        right = nullptr;
    }
    else{
        if(left != nullptr){
            left->findRemove(idElem, ids);
        }
        if(right != nullptr){
            right->findRemove(idElem, ids);
        }
    }
}

void removeChilds(std::set<int> &ids){
    if(left != nullptr){
        left->removeChilds(ids);
        ids.erase(left->id);
        delete left;
        left = nullptr;
    }
    if(right != nullptr){
        right->removeChilds(ids);
        ids.erase(right->id);
        delete right;
        right = nullptr;
    }
}

void addElem(int idElem, int parent, std::set<int> &ids){
    if(id == parent){
        if(left == nullptr){
            left = new Node(idElem);
        }
        else{
            right = new Node(idElem);
        }
    }
}

```

```

ids.insert(idElem);

}
else{
if(left != nullptr){
left->addElem(idElem, parent, ids);
}
if(right != nullptr){
right->addElem(idElem, parent, ids);
}
}
}

int minHight(){
if(left == nullptr || right == nullptr){
return 0;
}
int lHight = -1;
int rHight = -1;
if(left != nullptr && left->available == true){
lHight = left->minHight();
}
if(right != nullptr && right->available == true){
rHight = right->minHight();
}

if(rHight == -1 && lHight == -1){
available = false;
return -1;
}
else if(rHight == -1){
return lHight + 1;
}
else if(lHight == -1){
return rHight + 1;
}
else{
return std::min(lHight, rHight) + 1;
}
}

void notAvailable(int idElem){
if(id == idElem){
available = false;
}
else{
if(left != nullptr){
left->notAvailable(idElem);
}
}
}

```

```

if(right != nullptr){
right->notAvailable(idElem);
}
}
}

```

```

int idForMinH(int hight, int curHight){
if(hight < curHight){
return -2;
}
else if(hight > curHight){
int curid = -2;
if(left != nullptr && left->available == true){
curid = left->idForMinH(hight, (curHight + 1));
}
if(right != nullptr && right->available == true && curid == -2){
curid = right->idForMinH(hight, (curHight + 1));
}
return curid;
}
else{
if(left == nullptr || right == nullptr){
return id;
}
return -2;
}
};

private:
Node* root;
public:
std::set<int> ids;
Tree(){
root = new Node(-1);
}

```

```

bool exist(int id){
if(ids.find(id) != ids.end()){
return true;
}
return false;
}

```

```

void notAvailable(int id){
root->notAvailable(id);
}
int findId(){
int h = root->minHight();

```

```

return root->idForMinH(h, 0);
}

void addElem(int id, int parent){
root->addElem(id, parent, ids);
}

void Remove(int idElem){
root->findRemove(idElem, ids);
}
~Tree(){
root->removeChilds(ids);
delete root;
}
};

```

### **top\_node.c** (вычислительный узел)

```

#pragma once
#include <iostream>
#include "ze_mes_queue.h"
#include <string>
#include <sstream>
#include <unistd.h>
#include <map>

class TNode{
private:
    zmq::context_t context;
    std::map<std::string, int> wiki_node;
public:
    zmq::socket_t left, right, parent;
    int id;
    int leftId;
    int rightId;
    int parentId;
    int leftPort;
    int rightPort;
    int parentPort;

    TNode(int idElem, int parentP, int parID): id(idElem), parentPort(parentP),
    parentId(parID), leftId(-2), rightId(-2),
    left(context, ZMQ_REQ), right(context, ZMQ_REQ), parent(context, ZMQ_REP)
    {
        if(idElem != -1){
            connect(parent, parentPort);
        }
    }
}

```

```

}
~TNode(){}

std::string createChild(int childId){
int port;
bool isleft = false;
if(leftId == -2){
leftPort = bind(left, childId);
leftId = childId;
port = leftPort;
isleft = true;
}else if(rightId == -2){
rightPort = bind(right, childId);
rightId = childId;
port = rightPort;
}else{
return "Error create";
}
int pid = fork();
if(pid == 0){
execl("./server", "server", std::to_string(childId).c_str(), std::to_string(port).c_str(),
std::to_string(id).c_str(), (char*)NULL);
std::cout << "Error execl" << std::endl;
exit(1);
}
else{
std::string pidChild;
try{
if(isleft){
left.setsockopt(ZMQ_SNDTIMEO, 3000);
send_message(left, "pid");
pidChild = receive_message(left);
}
else{
right.setsockopt(ZMQ_SNDTIMEO, 3000);
send_message(right, "pid");
pidChild = receive_message(right);
}
return "OK: " + pidChild;
}
catch(int){
return "Error: can't connect to child";
}
}
}

std::string Ping(int idElem){
std::string answer = "OK: 0";

```



```

if(idElem == id){
    answer = "OK: 1";
    return answer;
}
else if(leftId == idElem){
    std::string message = "ping " + std::to_string(idElem);
    send_message(left, message);
    try{
        message = receive_message(left);
        if(message == "OK: 1"){
            answer = message;
        }
    }
    catch(int){}
}
else if(rightId == idElem){
    std::string message = "ping " + std::to_string(idElem);
    send_message(right, message);
    try{
        message = receive_message(right);
        if(message == "OK: 1"){
            answer = message;
        }
    }
    catch(int){}
}
return answer;
}

```

```

std::string sendStr(std::string str, int idElem){
    std::string answer = "Error: id is not found";

```

```

if(leftId == -2 && rightId == -2){
    return answer;
}
else if(leftId == idElem){
    if(Ping(leftId) == "OK: 1"){
        send_message(left, str);
        try{
            answer = receive_message(left);
        }
        catch(int){}
    }
}
else if(rightId == idElem){
    if(Ping(rightId) == "OK: 1"){
        send_message(right, str);
        try{

```

```

answer = receive_message(right);
}
catch(int){}
}
}
else{
if(Ping(leftId) == "OK: 1"){
std::string message = "send " + std::to_string(idElem) + " " + str;
send_message(left, message);
try{
message = receive_message(left);
}
catch(int){
message = "Error: id is not found";
}
if(message != "Error: id is not found"){
answer = message;
}
}
if(Ping(rightId) == "OK: 1"){
std::string message = "send " + std::to_string(idElem) + " " + str;
send_message(right, message);
try{
message = receive_message(right);
}
catch(int){
message = "Error: id is not found";
}
if(message != "Error: id is not found"){
answer = message;
}
}
}
return answer;
}

```

```

std::string exec(std::string str){
std::istringstream command(str);
std::string answer = "OK:" + std::to_string(id);
std::string key; command >> key;
int val;
if(command >> val){
wiki_node[key] = val;
}else{
if(wiki_node.find(key) != wiki_node.end()){
answer += ": " + std::to_string(wiki_node[key]);
}else{
answer += ": " + key + " not found";
}
}
}

```

```

}
}
return answer;
}

std::string clearChild(int child){
if(leftId == child){
leftId = -2;
unbind(left, leftPort);
}
else{
rightId = -2;
unbind(right, rightPort);
}
return "OK";
}

std::string removeElem(){
//std::string answer;
if(leftId != -2){
if(Ping(leftId) == "OK: 1"){
std::string message = "remove";
send_message(left, message);
try{
message = receive_message(left);
}
catch(int){}
unbind(left, leftPort);
left.close();
}
}
if(rightId != -2){
if(Ping(rightId) == "OK: 1"){
std::string message = "remove";
send_message(right, message);
try{
message = receive_message(right);
}
catch(int){}
unbind(right, rightPort);
right.close();
}
}
return std::to_string(parentId);
}
};

```

**server.cpp**

```

#include <iostream>
#include "top_node.h"
#include <sys/time.h>
#include "ze_mes_queue.h"
#include <string>
#include "tree.h"
#include <sstream>

int main(int argc, char *argv[]){
    if (argc < 4){
        printf("Usage: ./main childID parentPort parentID\n");
        exit(-1);
    }
    TNode node(atoi(argv[1]), atoi(argv[2]), atoi(argv[3]));
    while(1){
        std::string message;
        std::string command;
        message = receive_message(node.parent);
        std::istringstream request(message);
        request >> command;
        if(command == "pid"){
            std::string answer = std::to_string(getpid());
            send_message(node.parent, answer);
        }
        else if(command == "ping"){
            int child;
            request >> child;
            std::string answer = node.Ping(child);
            send_message(node.parent, answer);
        }
        else if(command == "create"){
            int child;
            request >> child;
            std::string answer = node.createChild(child);
            send_message(node.parent, answer);
        }
        else if(command == "exec"){
            std::string str;
            getline(request, str);
            std::string answer = node.exec(str);
            send_message(node.parent, answer);
        }
        else if(command == "remove"){
            std::string answer = node.removeElem();
            send_message(node.parent, answer);
            disconnect(node.parent, node.parentPort);
            node.parent.close();
            break;
        }
    }
}

```

```

} else if (command == "clear") {
    int child;
    request >> child;
    std::string answer = node.clearChild(child);
    send_message(node.parent, answer);
}
}
sleep(1);
return 0;
}

```

### **client.cpp**

```

#include <iostream>
#include "top_node.h"
#include "ze_mes_queue.h"
#include <sys/time.h>
#include <string>
#include <unistd.h>
#include "tree.h"

std::vector<int> treee;

int main() {
    std::string command;
    TNode node(-1, -1, -1);
    Tree tree;
    std::string answer;
    while (std::cin >> command) {
        if (command == "create") {
            int child;
            std::cin >> child;
            if (tree.exist(child)) {
                std::cout << "Error: child already existed!\n";
            }
            else {
                treee.push_back(child);
                while (true) {
                    int idParent = tree.findId();
                    if (idParent == node.id) {
                        answer = node.createChild(child);
                        tree.addElem(child, idParent);
                        break;
                    }
                    else {
                        std::string message = "create " + std::to_string(child);
                        answer = node.sendStr(message, idParent);
                        if (answer == "Error: id is not found") {

```

```

tree.notAvailable(idParent);
}
else{
tree.addElem(child, idParent);
break;
}
}
}
std::cout << answer << std::endl;
}
} else if(command == "ping") {
int child;
std::cin >> child;
if(!tree.exist(child)){
std::cout << "Error: child does not exist!\n";
}
else if(node.leftId == child || node.rightId == child){
answer = node.Ping(child);
std::cout << answer << std::endl;
}
else{
std::string message = "ping " + std::to_string(child);
answer = node.sendStr(message, child);
if(answer == "Error: id is not found"){
answer = "OK: 0";
}
std::cout << answer << std::endl;
}
} else if(command == "exec"){
std::string str;
int child;
std::cin >> child;
getline(std::cin, str);
if(!tree.exist(child)){
std::cout << "Error: child does not exist!\n";
}else{
std::string message = "exec " + str;
answer = node.sendStr(message, child);
std::cout << answer << std::endl;
}
} else if(command == "remove"){
int child;
std::cin >> child;
std::string message = "remove";
if(!tree.exist(child)){
std::cout << "Error: child does not exist!\n";
}else{
answer = node.sendStr(message, child);

```

```

tree.erase(std::remove(tree.begin(), tree.end(), child), tree.end());
if(answer != "Error: id is not found"){
tree.Remove(child);
if(child == node.leftId){
unbind(node.left, node.leftPort);
node.leftId = -2;
answer = "OK";
}
else if(child == node.rightId){
node.rightId = -2;
unbind(node.right, node.rightPort);
answer = "OK";
}
else{
message = "clear " + std::to_string(child);
answer = node.sendStr(message, std::stoi(answer));
}
std::cout << answer << std::endl;
}
}
} else if (command == "kill") {
node.removeElem();
tree.Remove(tree.findId());
tree.clear();
break;
}
}
return 0;
}

```

## Протокол работы программы

### Тестирование:

mishazhadnov@McB-airmi build % ./client

create 13

OK: 84596

create 23

OK: 84604

exec 13 myVal 1

OK:13

exec 13 mv 4

OK:13

exec 23 myVal

OK:23: 'myVal' not found

exec 23 myVal 11

OK:23

exec 13 myVal

OK:13: 1

ping 23

OK: 1

ping 13

OK: 1

exec 23 myVal

OK:23: 11

ping 23

OK: 1

ping 10

Error: child does not exist!

remove 13

OK

exec 13 myVal

Error: child does not exist!

kill

### **Dtrace (аналог strace):**

mishazhadnov@McB-airmi build % sudo dtruss -f ./client

dtrace: system integrity protection is on, some features will not be available

PID/THRD SYSCALL(args) = return

84911/0x7129df: fork() = 0 0



```

84911/0x7129df: munmap(0x1189CD000, 0xA0000)      = 0 0

84911/0x7129df: munmap(0x118A6D000, 0x8000)      = 0 0

84911/0x7129df: munmap(0x118A75000, 0x4000)      = 0 0

84911/0x7129df: munmap(0x118A79000, 0x4000)      = 0 0

84911/0x7129df: munmap(0x118A7D000, 0x58000)      = 0 0

84911/0x7129df: open("\0", 0x100000, 0x0)        = 3 0

84911/0x7129df: fcntl(0x3, 0x32, 0x7FF7B2EC7280)   = 0 0

84911/0x7129df: close(0x3)                        = 0 0

84911/0x7129df: fsgetpath(0x7FF7B2EC7290, 0x400, 0x7FF7B2EC7278)   = 62 0

84911/0x7129df: fsgetpath(0x7FF7B2EC7290, 0x400, 0x7FF7B2EC7278)   = 14 0

84911/0x7129df: csctl(0x0, 0x7FF7B2EC769C, 0x4)      = -1 1

84911/0x7129df: __mac_syscall(0x7FF815B08E3B, 0x2, 0x7FF7B2EC7500)   = 0 0

84911/0x7129df: csctl(0x0, 0x7FF7B2EC76AC, 0x4)      = -1 1

84911/0x7129df: __mac_syscall(0x7FF815B05DC6, 0x5A, 0x7FF7B2EC7640)   = 0 0

dtrace: error on enabled probe ID 1741 (ID 573: syscall::sysctl:return): invalid kernel access in action #11 at DIF offset 28

dtrace: error on enabled probe ID 1741 (ID 573: syscall::sysctl:return): invalid kernel access in action #11 at DIF offset 28

dtrace: error on enabled probe ID 1741 (ID 573: syscall::sysctl:return): invalid kernel access in action #11 at DIF offset 28

dtrace: error on enabled probe ID 1741 (ID 573: syscall::sysctl:return): invalid kernel access in action #11 at DIF offset 28

84911/0x7129df: open("\0", 0x20100000, 0x0)        = 3 0

84911/0x7129df: openat(0x3, "System/Cryptexes/OS\0", 0x100000, 0x0)    = 4 0

84911/0x7129df: dup(0x4, 0x0, 0x0)                  = 5 0

84911/0x7129df: fstatat64(0x4, 0x7FF7B2EC63E1, 0x7FF7B2EC67E0)      = 0 0

84911/0x7129df: openat(0x4, "System/Library/dyld/\0", 0x100000, 0x0)   = 6 0

84911/0x7129df: fcntl(0x6, 0x32, 0x7FF7B2EC6470)      = 0 0

84911/0x7129df: dup(0x6, 0x0, 0x0)                  = 7 0

84911/0x7129df: dup(0x5, 0x0, 0x0)                  = 8 0

84911/0x7129df: close(0x3)                        = 0 0

84911/0x7129df: close(0x5)                        = 0 0

84911/0x7129df: close(0x4)                        = 0 0

84911/0x7129df: close(0x6)                        = 0 0

84911/0x7129df: shared_region_check_np(0x7FF7B2EC6D58, 0x0, 0x0)      = 0 0

84911/0x7129df: fsgetpath(0x7FF7B2EC72C0, 0x400, 0x7FF7B2EC71F8)    = 83 0

```

84911/0x7129df: fcntl(0x8, 0x32, 0x7FF7B2EC72C0) = 0 0

84911/0x7129df: close(0x8) = 0 0

84911/0x7129df: close(0x7) = 0 0

84911/0x7129df: getfsstat64(0x0, 0x0, 0x2) = 7 0

84911/0x7129df: getfsstat64(0x10D602AA0, 0x3B48, 0x2) = 7 0

84911/0x7129df: getattrlist("/^0", 0x7FF7B2EC7200, 0x7FF7B2EC7170) = 0 0

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/System/Library/dyld/dyld\_shared\_cache\_x86\_64h0", 0x7FF7B2EC7538, 0x0) = 0 0

dtrace: error on enabled probe ID 1690 (ID 845: syscall::stat64:return): invalid address (0x0) in action #12 at DIF offset 12

84911/0x7129df: stat64("/Users/mishazhadnov/Desktop/wD/OS\_labs\_3t/lab5-7/build/client0", 0x7FF7B2EC69D0, 0x0) = 0 0

84911/0x7129df: open("/Users/mishazhadnov/Desktop/wD/OS\_labs\_3t/lab5-7/build/client0", 0x0, 0x0) = 3 0

84911/0x7129df: mmap(0x0, 0x25418, 0x1, 0x40002, 0x3, 0x0) = 0x10D064000 0

84911/0x7129df: fcntl(0x3, 0x32, 0x7FF7B2EC6AE0) = 0 0

84911/0x7129df: close(0x3) = 0 0

84911/0x7129df: munmap(0x10D064000, 0x25418) = 0 0

84911/0x7129df: stat64("/Users/mishazhadnov/Desktop/wD/OS\_labs\_3t/lab5-7/build/client0", 0x7FF7B2EC6F30, 0x0) = 0 0

84911/0x7129df: open("/usr/local/opt/zeromq/lib/libzmq.5.dylib0", 0x0, 0x0) = 3 0

84911/0x7129df: fcntl(0x3, 0x32, 0x7FF7B2EC6380) = 0 0

84911/0x7129df: close(0x3) = 0 0

84911/0x7129df: stat64("/usr/local/opt/zeromq/lib/libzmq.5.dylib0", 0x7FF7B2EC5F40, 0x0) = 0 0

84911/0x7129df: stat64("/usr/local/opt/zeromq/lib/libzmq.5.dylib0", 0x7FF7B2EC59A0, 0x0) = 0 0

84911/0x7129df: open("/usr/local/opt/zeromq/lib/libzmq.5.dylib0", 0x0, 0x0) = 3 0

84911/0x7129df: mmap(0x0, 0x91C08, 0x1, 0x40002, 0x3, 0x0) = 0x10D064000 0

84911/0x7129df: fcntl(0x3, 0x32, 0x7FF7B2EC5AB0) = 0 0

84911/0x7129df: close(0x3) = 0 0

84911/0x7129df: open("/usr/local/Cellar/zeromq/4.3.5\_1/lib/libzmq.5.dylib0", 0x0, 0x0) = 3 0

84911/0x7129df: fcntl(0x3, 0x62, 0x7FF7B2EC5768) = 0 0

84911/0x7129df: mmap(0x10D501000, 0x54000, 0x5, 0x40012, 0x3, 0x0) = 0x10D501000 0

84911/0x7129df: mmap(0x10D555000, 0x8000, 0x3, 0x40012, 0x3, 0x54000) = 0x10D555000 0

84911/0x7129df: mmap(0x10D55D000, 0x4000, 0x3, 0x40012, 0x3, 0x5C000) = 0x10D55D000 0

84911/0x7129df: mmap(0x10D561000, 0x34000, 0x1, 0x40012, 0x3, 0x60000) = 0x10D561000 0

84911/0x7129df: close(0x3) = 0 0

84911/0x7129df: munmap(0x10D064000, 0x91C08) = 0 0

84911/0x7129df: stat64("/usr/lib/libc++.1.dylib\0", 0x7FF7B2EC5F40, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/libc++.1.dylib\0", 0x7FF7B2EC5EF0, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/libc++.1.dylib\0", 0x7FF7B2EC5F40, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/libobjc.A.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/libobjc.A.dylib\0", 0x7FF7B2EC3B40, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/libobjc.A.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_blocks.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_blocks.dylib\0", 0x7FF7B2EC3B30, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_blocks.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libxpc.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libxpc.dylib\0", 0x7FF7B2EC3B40, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libxpc.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_trace.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_trace.dylib\0", 0x7FF7B2EC3B30, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_trace.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libcorecrypto.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libcorecrypto.dylib\0", 0x7FF7B2EC3B40, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libcorecrypto.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_malloc.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_malloc.dylib\0", 0x7FF7B2EC3B30, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_malloc.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libdispatch.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libdispatch.dylib\0", 0x7FF7B2EC3B40, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libdispatch.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_featureflags.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_featureflags.dylib\0", 0x7FF7B2EC3B30, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_featureflags.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_c.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_c.dylib\0", 0x7FF7B2EC3B40, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_c.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/libc++.1.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/libc++.1.dylib\0", 0x7FF7B2EC3B40, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/libc++.1.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/libc++abi.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/libc++abi.dylib\0", 0x7FF7B2EC3B40, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/libc++abi.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libdyld.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libdyld.dylib\0", 0x7FF7B2EC3B40, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libdyld.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_info.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_info.dylib\0", 0x7FF7B2EC3B40, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_info.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_darwin.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_darwin.dylib\0", 0x7FF7B2EC3B30, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_darwin.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_notify.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_notify.dylib\0", 0x7FF7B2EC3B30, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_notify.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_networkextension.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_networkextension.dylib\0", 0x7FF7B2EC3B30, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_networkextension.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_asl.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_asl.dylib\0", 0x7FF7B2EC3B40, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_asl.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_symptoms.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_symptoms.dylib\0", 0x7FF7B2EC3B30, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_symptoms.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_containermanager.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_containermanager.dylib\0", 0x7FF7B2EC3B30, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_containermanager.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_configuration.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_configuration.dylib\0", 0x7FF7B2EC3B30, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_configuration.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_sandbox.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_sandbox.dylib\0", 0x7FF7B2EC3B30, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_sandbox.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libquarantine.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libquarantine.dylib\0", 0x7FF7B2EC3B40, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libquarantine.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_coreservices.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_coreservices.dylib\0", 0x7FF7B2EC3B30, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_coreservices.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_m.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_m.dylib\0", 0x7FF7B2EC3B40, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_m.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libmacho.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libmacho.dylib\0", 0x7FF7B2EC3B40, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libmacho.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libcommonCrypto.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libcommonCrypto.dylib\0", 0x7FF7B2EC3B30, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libcommonCrypto.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libunwind.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libunwind.dylib\0", 0x7FF7B2EC3B40, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libunwind.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/liboah.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/liboah.dylib\0", 0x7FF7B2EC3B40, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/liboah.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libcopyfile.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libcopyfile.dylib\0", 0x7FF7B2EC3B40, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libcopyfile.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libcompiler\_rt.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libcompiler\_rt.dylib\0", 0x7FF7B2EC3B40, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libcompiler\_rt.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_collections.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_collections.dylib\0", 0x7FF7B2EC3B30, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_collections.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_secinit.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_secinit.dylib\0", 0x7FF7B2EC3B30, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_secinit.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libremovefile.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libremovefile.dylib\0", 0x7FF7B2EC3B40, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libremovefile.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libkeymgr.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libkeymgr.dylib\0", 0x7FF7B2EC3B40, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libcache.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/libSystem.B.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/libSystem.B.dylib\0", 0x7FF7B2EC3B40, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/libSystem.B.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_darwindirectory.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_darwindirectory.dylib\0", 0x7FF7B2EC3B30, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/system/libsystem\_darwindirectory.dylib\0", 0x7FF7B2EC3B90, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/libSystem.B.dylib\0", 0x7FF7B2EC5F40, 0x0) = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/libSystem.B.dylib\0", 0x7FF7B2EC5EF0, 0x0) = -1 2

84911/0x7129df: stat64("/usr/lib/libSystem.B.dylib\0", 0x7FF7B2EC5F40, 0x0) = -1 2

84911/0x7129df: open("/usr/local/opt/libsodium/lib/libsodium.26.dylib\0", 0x0, 0x0) = 3 0

84911/0x7129df: fcntl(0x3, 0x32, 0x7FF7B2EC62A0) = 0 0

84911/0x7129df: close(0x3) = 0 0

84911/0x7129df: stat64("/usr/local/opt/libsodium/lib/libsodium.26.dylib\0", 0x7FF7B2EC5E60, 0x0) = 0 0

84911/0x7129df: stat64("/usr/local/opt/libsodium/lib/libsodium.26.dylib\0", 0x7FF7B2EC58C0, 0x0) = 0 0

84911/0x7129df: open("/usr/local/opt/libsodium/lib/libsodium.26.dylib\0", 0x0, 0x0) = 3 0

84911/0x7129df: mmap(0x0, 0x76C48, 0x1, 0x40002, 0x3, 0x0) = 0x10D064000 0

84911/0x7129df: fcntl(0x3, 0x32, 0x7FF7B2EC59D0) = 0 0

84911/0x7129df: close(0x3) = 0 0

84911/0x7129df: open("/usr/local/Cellar/libsodium/1.0.19/lib/libsodium.26.dylib\0", 0x0, 0x0) = 3 0

84911/0x7129df: fcntl(0x3, 0x62, 0x7FF7B2EC5688) = 0 0

84911/0x7129df: mmap(0x10D641000, 0x60000, 0x5, 0x40012, 0x3, 0x0) = 0x10D641000 0

84911/0x7129df: mmap(0x10D6A1000, 0x4000, 0x3, 0x40012, 0x3, 0x60000) = 0x10D6A1000 0

84911/0x7129df: mmap(0x10D6A5000, 0x4000, 0x3, 0x40012, 0x3, 0x64000) = 0x10D6A5000 0

```

84911/0x7129df: mmap(0x10D6A9000, 0x10000, 0x1, 0x40012, 0x3, 0x68000)      = 0x10D6A9000 0

84911/0x7129df: close(0x3)          = 0 0

84911/0x7129df: munmap(0x10D064000, 0x76C48)          = 0 0

84911/0x7129df: stat64("/usr/lib/libSystem.B.dylib\0", 0x7FF7B2EC5E60, 0x0)      = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/libSystem.B.dylib\0", 0x7FF7B2EC5E10, 0x0)      = -1 2

84911/0x7129df: stat64("/usr/lib/libSystem.B.dylib\0", 0x7FF7B2EC5E60, 0x0)      = -1 2

84911/0x7129df: stat64("/usr/lib/libc++.1.dylib\0", 0x7FF7B2EC5E60, 0x0)      = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/libc++.1.dylib\0", 0x7FF7B2EC5E10, 0x0)      = -1 2

84911/0x7129df: stat64("/usr/lib/libc++.1.dylib\0", 0x7FF7B2EC5E60, 0x0)      = -1 2

84911/0x7129df: stat64("/usr/lib/libSystem.B.dylib\0", 0x7FF7B2EC5D80, 0x0)      = -1 2

84911/0x7129df: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/libSystem.B.dylib\0", 0x7FF7B2EC5D30, 0x0)      = -1 2

84911/0x7129df: stat64("/usr/lib/libSystem.B.dylib\0", 0x7FF7B2EC5D80, 0x0)      = -1 2

84911/0x7129df: open("/dev/dtracehelper\0", 0x2, 0x0)      = 3 0

84911/0x7129df: ioctl(0x3, 0x80086804, 0x7FF7B2EC5A78)      = 0 0

84911/0x7129df: close(0x3)          = 0 0

84911/0x7129df: open("/Users/mishazhadnov/Desktop/wD/OS_labs_3t/lab5-7/build/client\0", 0x0, 0x0)      = 3 0

84911/0x7129df: __mac_syscall(0x7FF815B08E3B, 0x2, 0x7FF7B2EC50C0)      = 0 0

84911/0x7129df: map_with_linking_np(0x7FF7B2EC4B50, 0x1, 0x7FF7B2EC4B80)      = -1 22

84911/0x7129df: close(0x3)          = 0 0

84911/0x7129df: mprotect(0x10D048000, 0x4000, 0x1)      = 0 0

84911/0x7129df: mprotect(0x10D555000, 0x8000, 0x1)      = 0 0

84911/0x7129df: open("/usr/local/Cellar/libsodium/1.0.19/lib/libsodium.26.dylib\0", 0x0, 0x0)      = 3 0

84911/0x7129df: __mac_syscall(0x7FF815B08E3B, 0x2, 0x7FF7B2EC50C0)      = 0 0

84911/0x7129df: map_with_linking_np(0x7FF7B2EC4F80, 0x1, 0x7FF7B2EC4FB0)      = -1 22

84911/0x7129df: close(0x3)          = 0 0

84911/0x7129df: mprotect(0x10D6A1000, 0x4000, 0x1)      = 0 0

84911/0x7129df: shared_region_check_np(0xFFFFFFFFFFFFFFFF, 0x0, 0x0)      = 0 0

84911/0x7129df: mprotect(0x10D600000, 0x40000, 0x1)      = 0 0

84911/0x7129df: access("/AppleInternal/XBS/.isChrooted\0", 0x0, 0x0)      = -1 2

84911/0x7129df: bsdthread_register(0x7FF815DFBB9C, 0x7FF815DFBB88, 0x2000)      = 1073742303 0

84911/0x7129df: getpid(0x0, 0x0, 0x0)      = 84911 0

84911/0x7129df: shm_open(0x7FF815C9EF42, 0x0, 0x15C9D388)      = 3 0

```

```

84911/0x7129df: fstat64(0x3, 0x7FF7B2EC6030, 0x0)      = 0 0

84911/0x7129df: mmap(0x0, 0x4000, 0x1, 0x40001, 0x3, 0x0) = 0x10D066000 0

84911/0x7129df: close(0x3)                             = 0 0

84911/0x7129df: ioctl(0x2, 0x4004667A, 0x7FF7B2EC60F4)  = 0 0

84911/0x7129df: mprotect(0x10D06F000, 0x1000, 0x0)      = 0 0

84911/0x7129df: mprotect(0x10D076000, 0x1000, 0x0)      = 0 0

84911/0x7129df: mprotect(0x10D077000, 0x1000, 0x0)      = 0 0

84911/0x7129df: mprotect(0x10D07E000, 0x1000, 0x0)      = 0 0

84911/0x7129df: mprotect(0x10D06A000, 0x98, 0x1)        = 0 0

84911/0x7129df: mprotect(0x10D06A000, 0x98, 0x3)        = 0 0

84911/0x7129df: mprotect(0x10D06A000, 0x98, 0x1)        = 0 0

84911/0x7129df: mprotect(0x10D07F000, 0x1000, 0x1)      = 0 0

84911/0x7129df: mprotect(0x10D080000, 0x98, 0x1)        = 0 0

84911/0x7129df: mprotect(0x10D080000, 0x98, 0x3)        = 0 0

84911/0x7129df: mprotect(0x10D080000, 0x98, 0x1)        = 0 0

84911/0x7129df: mprotect(0x10D06A000, 0x98, 0x3)        = 0 0

84911/0x7129df: mprotect(0x10D06A000, 0x98, 0x1)        = 0 0

84911/0x7129df: mprotect(0x10D07F000, 0x1000, 0x3)      = 0 0

84911/0x7129df: mprotect(0x10D07F000, 0x1000, 0x1)      = 0 0

84911/0x7129df: mprotect(0x10D600000, 0x40000, 0x3)     = 0 0

84911/0x7129df: mprotect(0x10D600000, 0x40000, 0x1)     = 0 0

84911/0x7129df: issetugid(0x0, 0x0, 0x0)               = 0 0

84911/0x7129df: mprotect(0x10D600000, 0x40000, 0x3)     = 0 0

84911/0x7129df: getentropy(0x7FF7B2EC58C0, 0x20, 0x0)   = 0 0

84911/0x7129df: mprotect(0x10D600000, 0x40000, 0x1)     = 0 0

84911/0x7129df: mprotect(0x10D600000, 0x40000, 0x3)     = 0 0

84911/0x7129df: mprotect(0x10D600000, 0x40000, 0x1)     = 0 0

84911/0x7129df: getattrlist("/Users/mishazhadnov/Desktop/wD/OS_labs_3t/lab5-7/build/client\0", 0x7FF7B2EC5FD0, 0x7FF7B2EC5FE8) = 0 0

84911/0x7129df: access("/Users/mishazhadnov/Desktop/wD/OS_labs_3t/lab5-7/build\0", 0x4, 0x0)      = 0 0

84911/0x7129df: open("/Users/mishazhadnov/Desktop/wD/OS_labs_3t/lab5-7/build\0", 0x0, 0x0)      = 3 0

84911/0x7129df: fstat64(0x3, 0x7FE2E77042E0, 0x0)      = 0 0

84911/0x7129df: csctl(0x0, 0x7FF7B2EC622C, 0x4)        = -1 1

```



```

84911/0x7129df: fgetatrl(0x3, 0x7FF7B2EC6240, 0x7FF7B2EC6260)      = 0 0

84911/0x7129df: __mac_syscall(0x7FF8211BC6A4, 0x2, 0x7FF7B2EC6260)  = 0 0

84911/0x7129df: fcntl(0x3, 0x32, 0x7FF7B2EC5EE0)                  = 0 0

84911/0x7129df: close(0x3)                                         = 0 0

84911/0x7129df: open("/Users/mishazhadnov/Desktop/wD/OS_labs_3t/lab5-7/build/Info.plist/0", 0x0, 0x0)  = -1 2

84911/0x7129df: proc_info(0x2, 0x14BAF, 0xD)                       = 64 0

84911/0x7129df: csops_audittoken(0x14BAF, 0x10, 0x7FF7B2EC6230)    = -1 22

dtrace: error on enabled probe ID 1741 (ID 573: syscall::syscall:return): invalid kernel access in action #11 at DIF offset 28

dtrace: error on enabled probe ID 1741 (ID 573: syscall::syscall:return): invalid kernel access in action #11 at DIF offset 28

84911/0x7129df: csops(0x14BAF, 0x0, 0x7FF7B2EC6694)               = 0 0

84911/0x7129df: mprotect(0x10D600000, 0x40000, 0x3)               = 0 0

84911/0x7129df: socketpair(0x1, 0x1, 0x0)                         = 0 0

84911/0x7129df: fcntl(0x3, 0x2, 0x1)                              = 0 0

84911/0x7129df: fcntl(0x4, 0x2, 0x1)                              = 0 0

84911/0x7129df: fcntl(0x3, 0x3, 0x0)                              = 2 0

84911/0x7129df: fcntl(0x3, 0x4, 0x6)                              = 0 0

84911/0x7129df: fcntl(0x4, 0x3, 0x0)                              = 2 0

84911/0x7129df: fcntl(0x4, 0x4, 0x6)                              = 0 0

84911/0x7129df: open("/dev/urandom/0", 0x0, 0x0)                 = 5 0

84911/0x7129df: fstat64(0x5, 0x7FF7B2EC7100, 0x0)                = 0 0

84911/0x7129df: fcntl(0x5, 0x1, 0x0)                              = 0 0

84911/0x7129df: fcntl(0x5, 0x2, 0x1)                              = 0 0

dtrace: error on enabled probe ID 1741 (ID 573: syscall::syscall:return): invalid kernel access in action #11 at DIF offset 28

dtrace: error on enabled probe ID 1713 (ID 175: syscall::read:return): invalid kernel access in action #13 at DIF offset 68

84911/0x7129df: socketpair(0x1, 0x1, 0x0)                         = 0 0

84911/0x7129df: fcntl(0x6, 0x2, 0x1)                              = 0 0

84911/0x7129df: fcntl(0x7, 0x2, 0x1)                              = 0 0

84911/0x7129df: fcntl(0x6, 0x3, 0x0)                              = 2 0

84911/0x7129df: fcntl(0x6, 0x4, 0x6)                              = 0 0

84911/0x7129df: fcntl(0x7, 0x3, 0x0)                              = 2 0

84911/0x7129df: fcntl(0x7, 0x4, 0x6)                              = 0 0

84911/0x7129df: kqueue(0x0, 0x0, 0x0)                             = 8 0

```

84911/0x7129df: kevent(0x8, 0x7FF7B2EC7140, 0x1) = 0 0

84911/0x7129df: bsdthread\_create(0x10D536590, 0x600000E04040, 0x700003AC3000) = 61616128 0

84911/0x7129e8: fork() = 0 0

84911/0x7129e8: thread\_selfid(0x0, 0x0, 0x0) = 7416296 0

84911/0x7129df: socketpair(0x1, 0x1, 0x0) = 0 0

84911/0x7129df: fcntl(0x9, 0x2, 0x1) = 0 0

84911/0x7129e8: \_\_pthread\_sigmask(0x1, 0x700003AC2F94, 0x0) = 0 0

84911/0x7129df: fcntl(0xA, 0x2, 0x1) = 0 0

84911/0x7129df: fcntl(0x9, 0x3, 0x0) = 2 0

84911/0x7129e8: proc\_info(0x5, 0x14BAF, 0x2) = 0 0

84911/0x7129df: fcntl(0x9, 0x4, 0x6) = 0 0

84911/0x7129df: fcntl(0xA, 0x3, 0x0) = 2 0

84911/0x7129df: fcntl(0xA, 0x4, 0x6) = 0 0

84911/0x7129df: kqueue(0x0, 0x0, 0x0) = 11 0

84911/0x7129df: kevent(0xB, 0x7FF7B2EC7140, 0x1) = 0 0

84911/0x7129df: bsdthread\_create(0x10D536590, 0x600000E04100, 0x700003B46000) = 62152704 0

84911/0x7129e9: fork() = 0 0

84911/0x7129e9: thread\_selfid(0x0, 0x0, 0x0) = 7416297 0

84911/0x7129e9: \_\_pthread\_sigmask(0x1, 0x700003B45F94, 0x0) = 0 0

84911/0x7129df: socketpair(0x1, 0x1, 0x0) = 0 0

84911/0x7129e9: proc\_info(0x5, 0x14BAF, 0x2) = 0 0

84911/0x7129df: fcntl(0xC, 0x2, 0x1) = 0 0

84911/0x7129df: fcntl(0xD, 0x2, 0x1) = 0 0

84911/0x7129df: fcntl(0xC, 0x3, 0x0) = 2 0

84911/0x7129df: fcntl(0xC, 0x4, 0x6) = 0 0

84911/0x7129df: fcntl(0xD, 0x3, 0x0) = 2 0

84911/0x7129df: fcntl(0xD, 0x4, 0x6) = 0 0

84911/0x7129df: socketpair(0x1, 0x1, 0x0) = 0 0

84911/0x7129df: fcntl(0xE, 0x2, 0x1) = 0 0

84911/0x7129df: fcntl(0xF, 0x2, 0x1) = 0 0

84911/0x7129df: fcntl(0xE, 0x3, 0x0) = 2 0

84911/0x7129df: fcntl(0xE, 0x4, 0x6) = 0 0

```

84911/0x7129df: fcntl(0xF, 0x3, 0x0)      = 2 0

84911/0x7129df: fcntl(0xF, 0x4, 0x6)      = 0 0

84911/0x7129df: socketpair(0x1, 0x1, 0x0) = 0 0

84911/0x7129df: fcntl(0x10, 0x2, 0x1)     = 0 0

84911/0x7129df: fcntl(0x11, 0x2, 0x1)     = 0 0

84911/0x7129df: fcntl(0x10, 0x3, 0x0)     = 2 0

84911/0x7129df: fcntl(0x10, 0x4, 0x6)     = 0 0

84911/0x7129df: fcntl(0x11, 0x3, 0x0)     = 2 0

84911/0x7129df: fcntl(0x11, 0x4, 0x6)     = 0 0

84911/0x7129df: getrlimit(0x1008, 0x7FF7B2EC7000, 0x0) = 0 0

84911/0x7129df: fstat64(0x0, 0x7FF7B2EC6FE8, 0x0) = 0 0

84911/0x7129df: ioctl(0x0, 0x4004667A, 0x7FF7B2EC7034) = 0 0

create 13

OK: 84926

dtrace: error on enabled probe ID 1714 (ID 961: syscall::read_nocancel:return): invalid kernel access in action #13 at DIF offset 68

84911/0x7129df: poll(0x7FF7B2EC6AE0, 0x1, 0x0) = 0 0

dtrace: error on enabled probe ID 1741 (ID 573: syscall::sysctl:return): invalid kernel access in action #11 at DIF offset 28

dtrace: error on enabled probe ID 1741 (ID 573: syscall::sysctl:return): invalid kernel access in action #11 at DIF offset 28

84911/0x7129df: shm_open(0x7FF8194560E0, 0x0, 0x0) = 18 0

84911/0x7129df: mmap(0x0, 0x1000, 0x1, 0x40001, 0x12, 0x0) = 0x10D088000 0

84911/0x7129df: close_nocancel(0x12) = 0 0

84911/0x7129df: socket(0x2, 0x1, 0x6) = 18 0

84911/0x7129df: fcntl(0x12, 0x2, 0x1) = 0 0

84911/0x7129df: setsockopt(0x12, 0xFFFF, 0x1022) = 0 0

84911/0x7129df: fcntl(0x12, 0x2, 0x1) = 0 0

84911/0x7129df: setsockopt(0x12, 0xFFFF, 0x4) = 0 0

84911/0x7129df: bind(0x12, 0x7FE2E780CC0, 0x10) = 0 0

84911/0x7129df: listen(0x12, 0x64, 0x0) = 0 0

84911/0x7129df: getsockname(0x12, 0x7FF7B2EC6AE8, 0x7FF7B2EC6A8C) = 0 0

84911/0x7129df: getsockname(0x12, 0x7FF7B2EC6B28, 0x7FF7B2EC6ACC) = 0 0

84911/0x7129df: sendto(0x9, 0x7FF7B2EC6A97, 0x1) = 1 0

84911/0x7129df: sendto(0xC, 0x7FF7B2EC6A97, 0x1) = 1 0

```

```

84911/0x7129e9: kevent(0xB, 0x0, 0x0)      = 1 0

84911/0x7129e9: poll(0x700003B43E20, 0x1, 0x0)    = 1 0

84911/0x7129e9: recvfrom(0xA, 0x700003B43E27, 0x1)    = 1 0

84911/0x7129e9: kevent(0xB, 0x700003B43E10, 0x1)      = 0 0

84911/0x7129e9: poll(0x700003B43E20, 0x1, 0x0)    = 0 0

84911/0x7129df: fork()      = 84926 0

84926/0x712c6d: fork()      = 0 0

84926/0x712c6d: thread_selfid(0x0, 0x0, 0x0)      = 7416941 sodium.26.dylib0

84926/0x712c6d: bsdthread_register(0x7FF815DFBB9C, 0x7FF815DFBB88, 0x2000)    = -1 22

84926/0x712c6d: mprotect(0x10D080000, 0x98, 0x3)      = 0 0

84926/0x712c6d: mprotect(0x10D080000, 0x98, 0x1)      = 0 0

84911/0x7129df: poll(0x7FF7B2EC6FA0, 0x1, 0x0)      = 1 0

84911/0x7129df: recvfrom(0xD, 0x7FF7B2EC6FA7, 0x1)      = 1 0

84911/0x7129df: poll(0x7FF7B2EC6FA0, 0x1, 0x0)      = 0 0

dtrace: error on enabled probe ID 1688 (ID 287: syscall::execve:return): invalid address (0x10d047b89) in action #12 at DIF offset 12

84926/0x712c6e: fork()      = 0 ,b❖❖0

84926/0x712c6e: mprotect(0x1159DC000, 0x8000, 0x1)      = 0 @b❖❖0

84926/0x712c6e: thread_selfid(0x0, 0x0, 0x0)      = 7416942 0

84926/0x712c6e: shared_region_check_np(0x7FF7B9B588D0, 0x0, 0x0)      = 0 20

84926/0x712c6e: thread_selfid(0x0, 0x0, 0x0)      = 7416942 S_labs_3t/lab5-7/build/client0

84926/0x712c6e: getpid(0x0, 0x0, 0x0)      = 84926 lient0

84926/0x712c6e: proc_info(0xF, 0x14BBE, 0x0)      = 0 0

84926/0x712c6e: munmap(0x11593C000, 0xA0000)      = 0 0

84926/0x712c6e: munmap(0x1159DC000, 0x8000)      = 0 0

84926/0x712c6e: munmap(0x1159E4000, 0x4000)      = 0 0

84926/0x712c6e: munmap(0x1159E8000, 0x4000)      = 0 0

84926/0x712c6e: munmap(0x1159EC000, 0x58000)      = 0 0

84926/0x712c6e: open(".", 0, 0x100000, 0x0)      = 3 0

84926/0x712c6e: fcntl(0x3, 0x32, 0x7FF7B9B58260)      = 0 0

84926/0x712c6e: close(0x3)      = 0 0

84926/0x712c6e: fsgetpath(0x7FF7B9B58270, 0x400, 0x7FF7B9B58258)      = 62 0

84926/0x712c6e: fsgetpath(0x7FF7B9B58270, 0x400, 0x7FF7B9B58258)      = 14 0

```

```

84926/0x712c6e: csctl(0x0, 0x7FF7B9B5867C, 0x4)          = -1 1

84926/0x712c6e: __mac_syscall(0x7FF815B08E3B, 0x2, 0x7FF7B9B584E0)      = 0 0

84926/0x712c6e: csctl(0x0, 0x7FF7B9B5868C, 0x4)          = -1 1

84926/0x712c6e: __mac_syscall(0x7FF815B05DC6, 0x5A, 0x7FF7B9B58620)      = 0 0

dtrace: error on enabled probe ID 1741 (ID 573: syscall::sysctl:return): invalid kernel access in action #11 at DIF offset 28

dtrace: error on enabled probe ID 1741 (ID 573: syscall::sysctl:return): invalid kernel access in action #11 at DIF offset 28

dtrace: error on enabled probe ID 1741 (ID 573: syscall::sysctl:return): invalid kernel access in action #11 at DIF offset 28

dtrace: error on enabled probe ID 1741 (ID 573: syscall::sysctl:return): invalid kernel access in action #11 at DIF offset 28

84926/0x712c6e: open("/^0", 0x20100000, 0x0)              = 3 0

84926/0x712c6e: openat(0x3, "System/Cryptexes/OS/0", 0x100000, 0x0)        = 4 0

84926/0x712c6e: dup(0x4, 0x0, 0x0)                  = 5 0

84926/0x712c6e: fstatat64(0x4, 0x7FF7B9B573C1, 0x7FF7B9B577C0)        = 0 0

84926/0x712c6e: openat(0x4, "System/Library/dyld/^0", 0x100000, 0x0)        = 6 0

84926/0x712c6e: fcctl(0x6, 0x32, 0x7FF7B9B57450)            = 0 0

84926/0x712c6e: dup(0x6, 0x0, 0x0)                  = 7 0

84926/0x712c6e: dup(0x5, 0x0, 0x0)                  = 8 0

84926/0x712c6e: close(0x3)                      = 0 0

84926/0x712c6e: close(0x5)                      = 0 0

84926/0x712c6e: close(0x4)                      = 0 0

84926/0x712c6e: close(0x6)                      = 0 0

84926/0x712c6e: shared_region_check_np(0x7FF7B9B57D38, 0x0, 0x0)        = 0 0

84926/0x712c6e: fsgetpath(0x7FF7B9B582A0, 0x400, 0x7FF7B9B581D8)        = 83 0

84926/0x712c6e: fcctl(0x8, 0x32, 0x7FF7B9B582A0)            = 0 0

84926/0x712c6e: close(0x8)                      = 0 0

84926/0x712c6e: close(0x7)                      = 0 0

84926/0x712c6e: getfsstat64(0x0, 0x0, 0x2)              = 7 0

84926/0x712c6e: getfsstat64(0x106902AA0, 0x3B48, 0x2)        = 7 0

84926/0x712c6e: getatrlist("/^0", 0x7FF7B9B581E0, 0x7FF7B9B58150)        = 0 0

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/System/Library/dyld/dyld_shared_cache_x86_64h/0", 0x7FF7B9B58518, 0x0) = 0 0

dtrace: error on enabled probe ID 1690 (ID 845: syscall::stat64:return): invalid address (0x0) in action #12 at DIF offset 12

84926/0x712c6e: stat64("/Users/mishazhadnov/Desktop/wD/OS_labs_3t/lab5-7/build/server/0", 0x7FF7B9B579B0, 0x0) = 0 0

84926/0x712c6e: open("/Users/mishazhadnov/Desktop/wD/OS_labs_3t/lab5-7/build/server/0", 0x0, 0x0) = 3 0

```

```

84926/0x712c6e: mmap(0x0, 0x1E9E8, 0x1, 0x40002, 0x3, 0x0)      = 0x1063CB000 0

84926/0x712c6e: fcntl(0x3, 0x32, 0x7FF7B9B57AC0)              = 0 0

84926/0x712c6e: close(0x3)                                     = 0 0

84926/0x712c6e: munmap(0x1063CB000, 0x1E9E8)                   = 0 0

84926/0x712c6e: stat64("/Users/mishazhadnov/Desktop/wD/OS_labs_3t/lab5-7/build/server\0", 0x7FF7B9B57F10, 0x0)    = 0 0

84926/0x712c6e: open("/usr/local/opt/zeromq/lib/libzmq.5.dylib\0", 0x0, 0x0)      = 3 0

84926/0x712c6e: fcntl(0x3, 0x32, 0x7FF7B9B57360)                = 0 0

84926/0x712c6e: close(0x3)                                     = 0 0

84926/0x712c6e: stat64("/usr/local/opt/zeromq/lib/libzmq.5.dylib\0", 0x7FF7B9B56F20, 0x0)    = 0 0

84926/0x712c6e: stat64("/usr/local/opt/zeromq/lib/libzmq.5.dylib\0", 0x7FF7B9B56980, 0x0)    = 0 0

84926/0x712c6e: open("/usr/local/opt/zeromq/lib/libzmq.5.dylib\0", 0x0, 0x0)      = 3 0

84926/0x712c6e: mmap(0x0, 0x91C08, 0x1, 0x40002, 0x3, 0x0)      = 0x106801000 0

84926/0x712c6e: fcntl(0x3, 0x32, 0x7FF7B9B56A90)                = 0 0

84926/0x712c6e: close(0x3)                                     = 0 0

84926/0x712c6e: open("/usr/local/Cellar/zeromq/4.3.5_1/lib/libzmq.5.dylib\0", 0x0, 0x0)    = 3 0

84926/0x712c6e: fcntl(0x3, 0x62, 0x7FF7B9B56748)                = 0 0

84926/0x712c6e: mmap(0x106941000, 0x54000, 0x5, 0x40012, 0x3, 0x0)    = 0x106941000 0

84926/0x712c6e: mmap(0x106995000, 0x8000, 0x3, 0x40012, 0x3, 0x54000)    = 0x106995000 0

84926/0x712c6e: mmap(0x10699D000, 0x4000, 0x3, 0x40012, 0x3, 0x5C000)    = 0x10699D000 0

84926/0x712c6e: mmap(0x1069A1000, 0x34000, 0x1, 0x40012, 0x3, 0x60000)    = 0x1069A1000 0

84926/0x712c6e: close(0x3)                                     = 0 0

84926/0x712c6e: munmap(0x106801000, 0x91C08)                   = 0 0

84926/0x712c6e: stat64("/usr/lib/libc++.1.dylib\0", 0x7FF7B9B56F20, 0x0)    = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/libc++.1.dylib\0", 0x7FF7B9B56ED0, 0x0)    = -1 2

84926/0x712c6e: stat64("/usr/lib/libc++.1.dylib\0", 0x7FF7B9B56F20, 0x0)    = -1 2

84926/0x712c6e: stat64("/usr/lib/libobjc.A.dylib\0", 0x7FF7B9B54B70, 0x0)    = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/libobjc.A.dylib\0", 0x7FF7B9B54B20, 0x0)    = -1 2

84926/0x712c6e: stat64("/usr/lib/libobjc.A.dylib\0", 0x7FF7B9B54B70, 0x0)    = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem_blocks.dylib\0", 0x7FF7B9B54B70, 0x0)    = -1 close2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem_blocks.dylib\0", 0x7FF7B9B54B10, 0x0)    = -1
al/opt/zeromq/lib/libzmq.5.dylib2

84926/0x712c6e: stat64("/usr/lib/system/libsystem_blocks.dylib\0", 0x7FF7B9B54B70, 0x0)    = -1 al/opt/zeromq/lib/libzmq.5.dylib2

```

84926/0x712c6e: stat64("/usr/lib/system/libxpc.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 al/opt/zeromq/lib/libzmq.5.dylib2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libxpc.dylib\0", 0x7FF7B9B54B20, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libxpc.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_trace.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_trace.dylib\0", 0x7FF7B9B54B10, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_trace.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libcorecrypto.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libcorecrypto.dylib\0", 0x7FF7B9B54B20, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libcorecrypto.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_malloc.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_malloc.dylib\0", 0x7FF7B9B54B10, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_malloc.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libdispatch.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libdispatch.dylib\0", 0x7FF7B9B54B20, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libdispatch.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_featureflags.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_featureflags.dylib\0", 0x7FF7B9B54B10, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_featureflags.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_c.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_c.dylib\0", 0x7FF7B9B54B20, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_c.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/libc++.1.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/libc++.1.dylib\0", 0x7FF7B9B54B20, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/libc++.1.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/libc++abi.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/libc++abi.dylib\0", 0x7FF7B9B54B20, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/libc++abi.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libdyld.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libdyld.dylib\0", 0x7FF7B9B54B20, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libdyld.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_info.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_info.dylib\0", 0x7FF7B9B54B20, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_info.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_darwin.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_darwin.dylib\0", 0x7FF7B9B54B10, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_darwin.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_notify.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_notify.dylib\0", 0x7FF7B9B54B10, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_notify.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_networkextension.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_networkextension.dylib\0", 0x7FF7B9B54B10, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_networkextension.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_asl.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_asl.dylib\0", 0x7FF7B9B54B20, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_asl.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_symptoms.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_symptoms.dylib\0", 0x7FF7B9B54B10, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_symptoms.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_containermanager.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_containermanager.dylib\0", 0x7FF7B9B54B10, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_containermanager.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_configuration.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_configuration.dylib\0", 0x7FF7B9B54B10, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_configuration.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_sandbox.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_sandbox.dylib\0", 0x7FF7B9B54B10, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_sandbox.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libquarantine.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libquarantine.dylib\0", 0x7FF7B9B54B20, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libquarantine.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_coreservices.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_coreservices.dylib\0", 0x7FF7B9B54B10, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_coreservices.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_m.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2



84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_m.dylib\0", 0x7FF7B9B54B20, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_m.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libmacho.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libmacho.dylib\0", 0x7FF7B9B54B20, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libmacho.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libcommonCrypto.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libcommonCrypto.dylib\0", 0x7FF7B9B54B10, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libcommonCrypto.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libunwind.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libunwind.dylib\0", 0x7FF7B9B54B20, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libunwind.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/liboah.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/liboah.dylib\0", 0x7FF7B9B54B20, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/liboah.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libcopyfile.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libcopyfile.dylib\0", 0x7FF7B9B54B20, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libcopyfile.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libcompiler\_rt.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libcompiler\_rt.dylib\0", 0x7FF7B9B54B20, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libcompiler\_rt.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_collections.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_collections.dylib\0", 0x7FF7B9B54B10, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_collections.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_secinit.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_secinit.dylib\0", 0x7FF7B9B54B10, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_secinit.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libremovefile.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libremovefile.dylib\0", 0x7FF7B9B54B20, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libremovefile.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libkeymgr.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libkeymgr.dylib\0", 0x7FF7B9B54B20, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libkeymgr.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_dnssd.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_dnssd.dylib\0", 0x7FF7B9B54B10, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_dnssd.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libcache.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libcache.dylib\0", 0x7FF7B9B54B20, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libcache.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/libSystem.B.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/libSystem.B.dylib\0", 0x7FF7B9B54B20, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/libSystem.B.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_darwindirectory.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/system/libsystem\_darwindirectory.dylib\0", 0x7FF7B9B54B10, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/system/libsystem\_darwindirectory.dylib\0", 0x7FF7B9B54B70, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/libSystem.B.dylib\0", 0x7FF7B9B56F20, 0x0) = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/libSystem.B.dylib\0", 0x7FF7B9B56ED0, 0x0) = -1 2

84926/0x712c6e: stat64("/usr/lib/libSystem.B.dylib\0", 0x7FF7B9B56F20, 0x0) = -1 2

84926/0x712c6e: open("/usr/local/opt/libsodium/lib/libsodium.26.dylib\0", 0x0, 0x0) = 3 0

84926/0x712c6e: fcntl(0x3, 0x32, 0x7FF7B9B57280) = 0 

84926/0x712c6e: close(0x3) = 0 0

84926/0x712c6e: stat64("/usr/local/opt/libsodium/lib/libsodium.26.dylib\0", 0x7FF7B9B56E40, 0x0) = 0 0

84926/0x712c6e: stat64("/usr/local/opt/libsodium/lib/libsodium.26.dylib\0", 0x7FF7B9B568A0, 0x0) = 0 0

84926/0x712c6e: open("/usr/local/opt/libsodium/lib/libsodium.26.dylib\0", 0x0, 0x0) = 3 0

84926/0x712c6e: mmap(0x0, 0x76C48, 0x1, 0x40002, 0x3, 0x0) = 0x106801000 0

84926/0x712c6e: fcntl(0x3, 0x32, 0x7FF7B9B569B0) = 0 0

84926/0x712c6e: close(0x3) = 0 0

84926/0x712c6e: open("/usr/local/Cellar/libsodium/1.0.19/lib/libsodium.26.dylib\0", 0x0, 0x0) = 3 0

84926/0x712c6e: fcntl(0x3, 0x62, 0x7FF7B9B56668) = 0 0

84926/0x712c6e: mmap(0x106878000, 0x60000, 0x5, 0x40012, 0x3, 0x0) = 0x106878000 0

84926/0x712c6e: mmap(0x1068D8000, 0x4000, 0x3, 0x40012, 0x3, 0x60000) = 0x1068D8000 0

84926/0x712c6e: mmap(0x1068DC000, 0x4000, 0x3, 0x40012, 0x3, 0x64000) = 0x1068DC000 0

84926/0x712c6e: mmap(0x1068E0000, 0x10000, 0x1, 0x40012, 0x3, 0x68000) = 0x1068E0000 0

84926/0x712c6e: close(0x3) = 0 0

84926/0x712c6e: munmap(0x106801000, 0x76C48) = 0 0

```

84926/0x712c6e: stat64("/usr/lib/libSystem.B.dylib\0", 0x7FF7B9B56E40, 0x0)      = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/libSystem.B.dylib\0", 0x7FF7B9B56DF0, 0x0)      = -1 2

84926/0x712c6e: stat64("/usr/lib/libSystem.B.dylib\0", 0x7FF7B9B56E40, 0x0)      = -1 2

84926/0x712c6e: stat64("/usr/lib/libc++.1.dylib\0", 0x7FF7B9B56E40, 0x0)      = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/libc++.1.dylib\0", 0x7FF7B9B56DF0, 0x0)      = -1 @q♦♦2

84926/0x712c6e: stat64("/usr/lib/libc++.1.dylib\0", 0x7FF7B9B56E40, 0x0)      = -1 2

84926/0x712c6e: stat64("/usr/lib/libSystem.B.dylib\0", 0x7FF7B9B56D60, 0x0)      = -1 2

84926/0x712c6e: stat64("/System/Volumes/Preboot/Cryptexes/OS/usr/lib/libSystem.B.dylib\0", 0x7FF7B9B56D10, 0x0)      = -1 2

84926/0x712c6e: stat64("/usr/lib/libSystem.B.dylib\0", 0x7FF7B9B56D60, 0x0)      = -1 2

84926/0x712c6e: open("/dev/dtracehelper\0", 0x2, 0x0)      = 3 0

84926/0x712c6e: ioctl(0x3, 0x80086804, 0x7FF7B9B56A58)      = 0 0

84926/0x712c6e: close(0x3)      = 0 0

84926/0x712c6e: open("/Users/mishazhadnov/Desktop/wD/OS_labs_3t/lab5-7/build/server\0", 0x0, 0x0)      = 3 0

84926/0x712c6e: __mac_syscall(0x7FF815B08E3B, 0x2, 0x7FF7B9B560A0)      = 0 0

84926/0x712c6e: map_with_linking_np(0x7FF7B9B55B30, 0x1, 0x7FF7B9B55B60)      = -1 22

84926/0x712c6e: close(0x3)      = 0 0

84926/0x712c6e: mprotect(0x1063B3000, 0x4000, 0x1)      = 0 0

84926/0x712c6e: mprotect(0x106995000, 0x8000, 0x1)      = 0 0

84926/0x712c6e: open("/usr/local/Cellar/libsodium/1.0.19/lib/libsodium.26.dylib\0", 0x0, 0x0)      = 3 0

84926/0x712c6e: __mac_syscall(0x7FF815B08E3B, 0x2, 0x7FF7B9B560A0)      = 0 0

84926/0x712c6e: map_with_linking_np(0x7FF7B9B55F60, 0x1, 0x7FF7B9B55F90)      = -1 22

84926/0x712c6e: close(0x3)      = 0 0

84926/0x712c6e: mprotect(0x1068D8000, 0x4000, 0x1)      = 0 0

84926/0x712c6e: shared_region_check_np(0xFFFFFFFFFFFFFFFF, 0x0, 0x0)      = 0 0

84926/0x712c6e: mprotect(0x106900000, 0x40000, 0x1)      = 0 0

84926/0x712c6e: access("/AppleInternal/XBS/.isChrooted\0", 0x0, 0x0)      = -1 2

84926/0x712c6e: bsdthread_register(0x7FF815DFBB9C, 0x7FF815DFBB88, 0x2000)      = 1073742303 0

84926/0x712c6e: getpid(0x0, 0x0, 0x0)      = 84926 0

84926/0x712c6e: shm_open(0x7FF815C9EF42, 0x0, 0x15C9D388)      = 3 0

84926/0x712c6e: fstat64(0x3, 0x7FF7B9B57010, 0x0)      = 0 0

84926/0x712c6e: mmap(0x0, 0x4000, 0x1, 0x40001, 0x3, 0x0)      = 0x1063CD000 0

84926/0x712c6e: close(0x3)      = 0 0

```

84926/0x712c6e: ioctl(0x2, 0x4004667A, 0x7FF7B9B570D4) = 0 0

84926/0x712c6e: mprotect(0x1063D6000, 0x1000, 0x0) = 0 0

84926/0x712c6e: mprotect(0x1063DD000, 0x1000, 0x0) = 0 0

84926/0x712c6e: mprotect(0x1063DE000, 0x1000, 0x0) = 0 0

84926/0x712c6e: mprotect(0x1063E5000, 0x1000, 0x0) = 0 0

84926/0x712c6e: mprotect(0x1063D1000, 0x98, 0x1) = 0 0

84926/0x712c6e: mprotect(0x1063D1000, 0x98, 0x3) = 0 0

84926/0x712c6e: mprotect(0x1063D1000, 0x98, 0x1) = 0 0

84926/0x712c6e: mprotect(0x1063E6000, 0x1000, 0x1) = 0 0

84926/0x712c6e: mprotect(0x1063E7000, 0x98, 0x1) = 0 0

84926/0x712c6e: mprotect(0x1063E7000, 0x98, 0x3) = 0 0

84926/0x712c6e: mprotect(0x1063E7000, 0x98, 0x1) = 0 0

84926/0x712c6e: mprotect(0x1063D1000, 0x98, 0x3) = 0 0

84926/0x712c6e: mprotect(0x1063D1000, 0x98, 0x1) = 0 0

84926/0x712c6e: mprotect(0x1063E6000, 0x1000, 0x3) = 0 0

84926/0x712c6e: mprotect(0x1063E6000, 0x1000, 0x1) = 0 0

84926/0x712c6e: mprotect(0x106900000, 0x40000, 0x3) = 0 0

84926/0x712c6e: mprotect(0x106900000, 0x40000, 0x1) = 0 0

84926/0x712c6e: issetugid(0x0, 0x0, 0x0) = 0 0

84926/0x712c6e: mprotect(0x106900000, 0x40000, 0x3) = 0 0

84926/0x712c6e: getentropy(0x7FF7B9B568A0, 0x20, 0x0) = 0 0

84926/0x712c6e: mprotect(0x106900000, 0x40000, 0x1) = 0 0

84926/0x712c6e: mprotect(0x106900000, 0x40000, 0x3) = 0 0

84926/0x712c6e: mprotect(0x106900000, 0x40000, 0x1) = 0 0

84926/0x712c6e: getattrlist("/Users/mishazhadnov/Desktop/wD/OS\_labs\_3t/lab5-7/build/server\0", 0x7FF7B9B56FB0, 0x7FF7B9B56FC8) = 0 0

84926/0x712c6e: access("/Users/mishazhadnov/Desktop/wD/OS\_labs\_3t/lab5-7/build\0", 0x4, 0x0) = 0 0

84926/0x712c6e: open("/Users/mishazhadnov/Desktop/wD/OS\_labs\_3t/lab5-7/build\0", 0x0, 0x0) = 3 0

84926/0x712c6e: fstat64(0x3, 0x7F7E6A704530, 0x0) = 0 0

84926/0x712c6e: csrctl(0x0, 0x7FF7B9B5720C, 0x4) = -1 1

84926/0x712c6e: fgetattrlist(0x3, 0x7FF7B9B57220, 0x7FF7B9B57240) = 0 0

84926/0x712c6e: \_\_mac\_syscall(0x7FF8211BC6A4, 0x2, 0x7FF7B9B57240) = 0 0

84926/0x712c6e: fcntl(0x3, 0x32, 0x7FF7B9B56EC0) = 0 0

```

84926/0x712c6e: close(0x3)          = 0 0

84926/0x712c6e: open("/Users/mishazhadnov/Desktop/wD/OS_labs_3t/lab5-7/build/Info.plist", 0x0, 0x0)    = -1 2

84926/0x712c6e: proc_info(0x2, 0x14BBE, 0xD)          = 64 0

84926/0x712c6e: csops_audittoken(0x14BBE, 0x10, 0x7FF7B9B57210)      = -1 22

dtrace: error on enabled probe ID 1741 (ID 573: syscall::syscall:return): invalid kernel access in action #11 at DIF offset 28

dtrace: error on enabled probe ID 1741 (ID 573: syscall::syscall:return): invalid kernel access in action #11 at DIF offset 28

84926/0x712c6e: csops(0x14BBE, 0x0, 0x7FF7B9B57674)      = 0 0

84926/0x712c6e: mprotect(0x106900000, 0x40000, 0x3)      = 0 0

84926/0x712c6e: socketpair(0x1, 0x1, 0x0)              = 0 0

84926/0x712c6e: fcntl(0x3, 0x2, 0x1)                   = 0 0

84926/0x712c6e: fcntl(0x4, 0x2, 0x1)                   = 0 0

84926/0x712c6e: fcntl(0x3, 0x3, 0x0)                   = 2 0

84926/0x712c6e: fcntl(0x3, 0x4, 0x6)                   = 0 0

84926/0x712c6e: fcntl(0x4, 0x3, 0x0)                   = 2 0

84926/0x712c6e: fcntl(0x4, 0x4, 0x6)                   = 0 0

84926/0x712c6e: open("/dev/urandom", 0x0, 0x0)          = 5 0

84926/0x712c6e: fstat64(0x5, 0x7FF7B9B58190, 0x0)        = 0 0

84926/0x712c6e: fcntl(0x5, 0x1, 0x0)                   = 0 0

84926/0x712c6e: fcntl(0x5, 0x2, 0x1)                   = 0 0

dtrace: error on enabled probe ID 1741 (ID 573: syscall::syscall:return): invalid kernel access in action #11 at DIF offset 28

dtrace: error on enabled probe ID 1713 (ID 175: syscall::read:return): invalid kernel access in action #13 at DIF offset 68

84926/0x712c6e: socketpair(0x1, 0x1, 0x0)              = 0 0

84926/0x712c6e: fcntl(0x6, 0x2, 0x1)                   = 0 0

84926/0x712c6e: fcntl(0x7, 0x2, 0x1)                   = 0 0

84926/0x712c6e: fcntl(0x6, 0x3, 0x0)                   = 2 0

84926/0x712c6e: fcntl(0x6, 0x4, 0x6)                   = 0 0

84926/0x712c6e: fcntl(0x7, 0x3, 0x0)                   = 2 0

84926/0x712c6e: fcntl(0x7, 0x4, 0x6)                   = 0 0

84926/0x712c6e: kqueue(0x0, 0x0, 0x0)                 = 8 0

84926/0x712c6e: kevent(0x8, 0x7FF7B9B581D0, 0x1)        = 0 0

84926/0x712c6e: bsdtread_create(0x106976590, 0x600003CB0040, 0x70000E6E7000)    = 242118656 0

84926/0x712c6e: socketpair(0x1, 0x1, 0x0)              = 0 0

```

```

84926/0x712c6e: fcntl(0x9, 0x2, 0x1)      = 0 0

84926/0x712c6e: fcntl(0xA, 0x2, 0x1)      = 0 0

84926/0x712c6e: fcntl(0x9, 0x3, 0x0)      = 2 0

84926/0x712c6e: fcntl(0x9, 0x4, 0x6)      = 0 0

84926/0x712c70: fork()                    = 0 0

84926/0x712c6e: fcntl(0xA, 0x3, 0x0)      = 2 0

84926/0x712c70: thread_selfid(0x0, 0x0, 0x0)    = 7416944 0

84926/0x712c6e: fcntl(0xA, 0x4, 0x6)      = 0 0

84926/0x712c6e: kqueue(0x0, 0x0, 0x0)      = 11 0

84926/0x712c70: __pthread_sigmask(0x1, 0x70000E6E6F94, 0x0)    = 0 0

84926/0x712c6e: kevent(0xB, 0x7FF7B9B581D0, 0x1)    = 0 0

84926/0x712c70: proc_info(0x5, 0x14BBE, 0x2)      = 0 stat640

84926/0x712c6e: bsdthread_create(0x106976590, 0x600003CB0100, 0x70000E76A000)    = 242655232 0

84926/0x712c71: fork()                    = 0 0

84926/0x712c71: thread_selfid(0x0, 0x0, 0x0)    = 7416945 tem/libcompiler_rt.dylib0

84926/0x712c71: __pthread_sigmask(0x1, 0x70000E769F94, 0x0)    = 0 0

84926/0x712c6e: socketpair(0x1, 0x1, 0x0)      = 0 0

84926/0x712c71: proc_info(0x5, 0x14BBE, 0x2)      = 0 0

84926/0x712c6e: fcntl(0xC, 0x2, 0x1)      = 0 0

84926/0x712c6e: fcntl(0xD, 0x2, 0x1)      = 0 0

84926/0x712c6e: fcntl(0xC, 0x3, 0x0)      = 2 0

84926/0x712c6e: fcntl(0xC, 0x4, 0x6)      = 0 0

84926/0x712c6e: fcntl(0xD, 0x3, 0x0)      = 2 0

84926/0x712c6e: fcntl(0xD, 0x4, 0x6)      = 0 0

84926/0x712c6e: socketpair(0x1, 0x1, 0x0)      = 0 0

84926/0x712c6e: fcntl(0xE, 0x2, 0x1)      = 0 0

84926/0x712c6e: fcntl(0xF, 0x2, 0x1)      = 0 0

84926/0x712c6e: fcntl(0xE, 0x3, 0x0)      = 2 0

84926/0x712c6e: fcntl(0xE, 0x4, 0x6)      = 0 0

84926/0x712c6e: fcntl(0xF, 0x3, 0x0)      = 2 0

84926/0x712c6e: fcntl(0xF, 0x4, 0x6)      = 0 0

84926/0x712c6e: socketpair(0x1, 0x1, 0x0)      = 0 0

```

84926/0x712c6e: fcntl(0x10, 0x2, 0x1) = 0 0

84926/0x712c6e: fcntl(0x11, 0x2, 0x1) = 0 0

84926/0x712c6e: fcntl(0x10, 0x3, 0x0) = 2 0

84926/0x712c6e: fcntl(0x10, 0x4, 0x6) = 0 0

84926/0x712c6e: fcntl(0x11, 0x3, 0x0) = 2 0

84926/0x712c6e: fcntl(0x11, 0x4, 0x6) = 0 0

84926/0x712c6e: poll(0x7FF7B9B577E0, 0x1, 0x0) = 0 0

84926/0x712c6e: sendto(0x9, 0x7FF7B9B57797, 0x1) = 1 0

84926/0x712c6e: sendto(0x10, 0x7FF7B9B57797, 0x1) = 1 0

84926/0x712c71: kevent(0xB, 0x0, 0x0) = 1 0

84926/0x712c71: poll(0x70000E767E20, 0x1, 0x0) = 1 0

84926/0x712c6e: poll(0x7FF7B9B58160, 0x1, 0xFFFFFFFFFFFFFFFF) = 1 0

84926/0x712c71: recvfrom(0xA, 0x70000E767E27, 0x1) = 1 0

84926/0x712c6e: recvfrom(0x11, 0x7FF7B9B58167, 0x1) = 1 0

84926/0x712c6e: poll(0x7FF7B9B58160, 0x1, 0x0) = 0 0

84926/0x712c71: shm\_open(0x7FF8194560E0, 0x0, 0x0) = 18 0

84926/0x712c71: mmap(0x0, 0x1000, 0x1, 0x40001, 0x12, 0x0) = 0x1063EF000 0

84926/0x712c71: close\_nocancel(0x12) = 0 0

84926/0x712c71: socket(0x2, 0x1, 0x6) = 18 0

84926/0x712c71: fcntl(0x12, 0x2, 0x1) = 0 0

84926/0x712c71: setsockopt(0x12, 0xFFFF, 0x1022) = 0 0

84926/0x712c71: fcntl(0x12, 0x3, 0x0) = 2 0

84926/0x712c71: fcntl(0x12, 0x4, 0x6) = 0 0

84926/0x712c71: connect(0x12, 0x600001CB01C0, 0x10) = -1 36

84926/0x712c71: kevent(0xB, 0x70000E767DB0, 0x1) = 0 0

84926/0x712c71: poll(0x70000E767E20, 0x1, 0x0) = 0 0

84926/0x712c71: kevent(0xB, 0x0, 0x0) = 1 0

84911/0x7129e9: kevent(0xB, 0x0, 0x0) = 1 0

84911/0x7129e9: accept(0x12, 0x700003B43E10, 0x700003B43E0C) = 19 0

84911/0x7129e9: fcntl(0x13, 0x2, 0x1) = 0 0

84911/0x7129e9: setsockopt(0x13, 0xFFFF, 0x1022) = 0 0

84911/0x7129e9: setsockopt(0x13, 0x6, 0x1) = 0 0

84926/0x712c71: kevent(0xB, 0x70000E767E70, 0x1) = 0 0

84911/0x7129e9: getsockname(0x13, 0x700003B43DD8, 0x700003B43D7C) = 0 0

84926/0x712c71: getsockopt(0x12, 0xFFFF, 0x1007) = 0 0

84926/0x712c71: setsockopt(0x12, 0x6, 0x1) = 0 0

84926/0x712c71: getsockname(0x12, 0x70000E767E58, 0x70000E767DFC) = 0 0

84911/0x7129e9: getpeername(0x13, 0x700003B43DD8, 0x700003B43D7C) = 0 0

84926/0x712c71: getpeername(0x12, 0x70000E767D70, 0x70000E76793C) = 0 0

84926/0x712c71: fcntl(0x12, 0x3, 0x0) = 6 0

84926/0x712c71: fcntl(0x12, 0x4, 0x6) = 0 0

84911/0x7129e9: getpeername(0x13, 0x700003B43D80, 0x700003B4394C) = 0 0

84911/0x7129e9: fcntl(0x13, 0x3, 0x0) = 2 0

84926/0x712c71: sendto(0x9, 0x70000E767D97, 0x1) = 1 0

84911/0x7129e9: fcntl(0x13, 0x4, 0x6) = 0 0

84926/0x712c71: kevent(0xB, 0x0, 0x0) = 1 0

84926/0x712c71: poll(0x70000E767E20, 0x1, 0x0) = 1 0

84911/0x7129e9: sendto(0x9, 0x700003B43D97, 0x1) = 1 0

84926/0x712c71: recvfrom(0xA, 0x70000E767E27, 0x1) = 1 0

84911/0x7129e9: kevent(0xB, 0x0, 0x0) = 1 0

84911/0x7129e9: poll(0x700003B43E20, 0x1, 0x0) = 1 0

84926/0x712c71: kevent(0xB, 0x70000E767DF0, 0x1) = 0 0

84911/0x7129e9: recvfrom(0xA, 0x700003B43E27, 0x1) = 1 0

84926/0x712c71: kevent(0xB, 0x70000E767DF0, 0x1) = 0 0

84926/0x712c71: recvfrom(0x12, 0x7F7E6C008800, 0xC) = -1 35

84911/0x7129e9: kevent(0xB, 0x700003B43DF0, 0x1) = 0 0

84911/0x7129e9: kevent(0xB, 0x700003B43DF0, 0x1) = 0 0

84926/0x712c71: poll(0x70000E767E20, 0x1, 0x0) = 0 dylib0

84911/0x7129e9: recvfrom(0x13, 0x7FE2E9808800, 0xC) = -1 35

84926/0x712c71: kevent(0xB, 0x0, 0x0) = 1 0


84926/0x712c71: sendto(0x12, 0x7F7E6C008840, 0xA) = 10 0

84926/0x712c71: kevent(0xB, 0x70000E767EC0, 0x1) = 0 0

84911/0x7129e9: poll(0x700003B43E20, 0x1, 0x0) = 0 0

84911/0x7129e9: kevent(0xB, 0x0, 0x0) = 2 0



84911/0x7129e9: sendto(0x13, 0x7FE2E9808840, 0xA)	= 10 0
84911/0x7129e9: kevent(0xB, 0x700003B43EC0, 0x1)	= 0 0
84926/0x712c71: kevent(0xB, 0x0, 0x0)	= 1 0
84911/0x7129e9: recvfrom(0x13, 0x7FE2E9808800, 0xC)	= 10 0
84911/0x7129e9: kevent(0xB, 0x700003B43E20, 0x1)	= 0 0
84926/0x712c71: recvfrom(0x12, 0x7F7E6C008800, 0xC)	= 10 0
84911/0x7129e9: recvfrom(0x13, 0x7FE2E980880A, 0x2)	= -1 35
84911/0x7129e9: kevent(0xB, 0x0, 0x0)	= 1 0
84926/0x712c71: kevent(0xB, 0x70000E767E20, 0x1)	= 0 0
84926/0x712c71: recvfrom(0x12, 0x7F7E6C00880A, 0x2)	= -1 35
84911/0x7129e9: sendto(0x13, 0x7FE2E980884A, 0x1)	= 1 0
84911/0x7129e9: kevent(0xB, 0x700003B43EC0, 0x1)	= 0 0
84926/0x712c71: kevent(0xB, 0x0, 0x0)	= 1 0
84926/0x712c71: sendto(0x12, 0x7F7E6C00884A, 0x1)	= 1 0
84926/0x712c71: kevent(0xB, 0x70000E767EC0, 0x1)	= 0 0
84911/0x7129e9: kevent(0xB, 0x0, 0x0)	= 1 0
84926/0x712c71: kevent(0xB, 0x0, 0x0)	= 1 0
84911/0x7129e9: recvfrom(0x13, 0x7FE2E980880A, 0x2)	= 1 0
84926/0x712c71: recvfrom(0x12, 0x7F7E6C00880A, 0x2)	= 1 0
84911/0x7129e9: kevent(0xB, 0x700003B43E20, 0x1)	= 0 0
84926/0x712c71: kevent(0xB, 0x70000E767E20, 0x1)	= 0 0
84911/0x7129e9: recvfrom(0x13, 0x7FE2E980880B, 0x35)	= -1 35
84926/0x712c71: recvfrom(0x12, 0x7F7E6C00880B, 0x35)	= -1 35
84911/0x7129e9: kevent(0xB, 0x0, 0x0)	= 1 0
84926/0x712c71: kevent(0xB, 0x0, 0x0)	= 1 0
84911/0x7129e9: sendto(0x13, 0x7FE2E980884B, 0x35)	= 53 0
84926/0x712c71: sendto(0x12, 0x7F7E6C00884B, 0x35)	= 53 0
84911/0x7129e9: kevent(0xB, 0x700003B43EC0, 0x1)	= 0 0
84926/0x712c71: kevent(0xB, 0x70000E767EC0, 0x1)	= 0  0
84911/0x7129e9: kevent(0xB, 0x0, 0x0)	= 1 0
84926/0x712c71: kevent(0xB, 0x0, 0x0)	= 1 0
84911/0x7129e9: recvfrom(0x13, 0x7FE2E980880B, 0x35)	= 53 0

84926/0x712c71: recvfrom(0x12, 0x7F7E6C00880B, 0x35) = 53 0

84911/0x7129e9: kevent(0xB, 0x700003B43E80, 0x1) = 0 0

84911/0x7129e9: recvfrom(0x13, 0x7FE2E980B008, 0x2000) = -1 35

84911/0x7129e9: kevent(0xB, 0x0, 0x0) = 1 0

84911/0x7129e9: sendto(0x13, 0x7FE2E9809000, 0x28) = 40 0

84911/0x7129e9: kevent(0xB, 0x0, 0x0) = 1 0

84911/0x7129e9: kevent(0xB, 0x700003B43EC0, 0x1) = 0 0

84926/0x712c71: kevent(0xB, 0x70000E767E80, 0x1) = 0 0

84926/0x712c71: recvfrom(0x12, 0x7F7E6C008A08, 0x2000) = 40 0

84926/0x712c71: kevent(0xB, 0x0, 0x0) = 1 0

84926/0x712c71: sendto(0x10, 0x70000E767D97, 0x1) = 1 0

84926/0x712c6e: poll(0x7FF7B9B58160, 0x1, 0xFFFFFFFFFFFFFFFF) = 1 0

84926/0x712c71: sendto(0x12, 0x7F7E6C808200, 0x1B) = 27 0

84926/0x712c6e: recvfrom(0x11, 0x7FF7B9B58167, 0x1) = 1 0

84911/0x7129e9: kevent(0xB, 0x0, 0x0) = 1 Cryptexes/OS/usr/lib/libSystem.B.dylib0

84926/0x712c71: kevent(0xB, 0x0, 0x0) = 1 00000

84926/0x712c71: kevent(0xB, 0x70000E767EC0, 0x1) = 0 Cryptexes/OS/usr/lib/libSystem.B.dylib0

84926/0x712c6e: sendto(0x9, 0x7FF7B9B57F97, 0x1) = 1 0

84926/0x712c71: kevent(0xB, 0x0, 0x0) = 1 0

84911/0x7129e9: recvfrom(0x13, 0x7FE2E980B008, 0x2000) = 27 0

84926/0x712c71: poll(0x70000E767E20, 0x1, 0x0) = 1 0

84926/0x712c71: recvfrom(0xA, 0x70000E767E27, 0x1) = 1 0

84926/0x712c6e: poll(0x7FF7B9B58160, 0x1, 0x0) = 0 0

84926/0x712c71: poll(0x70000E767E20, 0x1, 0x0) = 0 0

84911/0x7129e9: sendto(0xC, 0x700003B43C97, 0x1) = 1 0

84911/0x7129df: poll(0x7FF7B2EC6FA0, 0x1, 0xBB8) = 1 0

84911/0x7129df: recvfrom(0xD, 0x7FF7B2EC6FA7, 0x1) = 1 0

84911/0x7129e9: kevent(0xB, 0x700003B43E60, 0x1) = 0 0

84911/0x7129e9: kevent(0xB, 0x700003B43E50, 0x1) = 0 0

84911/0x7129df: poll(0x7FF7B2EC6FA0, 0x1, 0x0) = 0 0

84911/0x7129df: sendto(0x9, 0x7FF7B2EC6F17, 0x1) = 1 0

84911/0x7129e9: kevent(0xB, 0x0, 0x0) = 1 0

84911/0x7129e9: poll(0x700003B43E20, 0x1, 0x0) = 1 0

84911/0x7129e9: recvfrom(0xA, 0x700003B43E27, 0x1) = 1 0

84911/0x7129e9: kevent(0xB, 0x700003B43E10, 0x1) = 0 0

84911/0x7129e9: sendto(0xC, 0x700003B43CD7, 0x1) = 1 0

84911/0x7129df: poll(0x7FF7B2EC6FA0, 0x1, 0xFFFFFFFFFFFFFFFF) = 1 0

84911/0x7129df: recvfrom(0xD, 0x7FF7B2EC6FA7, 0x1) = 1 0

84911/0x7129e9: sendto(0x13, 0x7FE2E9809000, 0x7) = 7 0

84911/0x7129df: poll(0x7FF7B2EC6FA0, 0x1, 0x0) = 0 0

84926/0x712c71: kevent(0xB, 0x0, 0x0) = 1 0

84911/0x7129e9: poll(0x700003B43E20, 0x1, 0x0) = 0 0

84911/0x7129e9: kevent(0xB, 0x0, 0x0) = 1 0

84926/0x712c71: recvfrom(0x12, 0x7F7E6C008A08, 0x2000) = 7 0

84911/0x7129e9: kevent(0xB, 0x700003B43EC0, 0x1) = 0 0

84926/0x712c71: sendto(0x10, 0x70000E767E17, 0x1) = 1 0

84926/0x712c6e: poll(0x7FF7B9B58160, 0x1, 0xFFFFFFFFFFFFFFFF) = 1 0

84926/0x712c6e: recvfrom(0x11, 0x7FF7B9B58167, 0x1) = 1 em.B.dylib0

84926/0x712c6e: poll(0x7FF7B9B58160, 0x1, 0x0) = 0 0

84926/0x712c6e: sendto(0x9, 0x7FF7B9B580D7, 0x1) = 1 0

84926/0x712c71: kevent(0xB, 0x0, 0x0) = 1 0

84926/0x712c71: poll(0x70000E767E20, 0x1, 0x0) = 1 0

84926/0x712c6e: poll(0x7FF7B9B581A0, 0x1, 0x0) = 0 0

84926/0x712c71: recvfrom(0xA, 0x70000E767E27, 0x1) = 1 0

84926/0x712c71: kevent(0xB, 0x70000E767E10, 0x1) = 0 0

84926/0x712c71: sendto(0x10, 0x70000E767CD7, 0x1) = 1 0

84926/0x712c71: sendto(0x12, 0x7F7E6C808200, 0x9) = 9 0

84926/0x712c6e: poll(0x7FF7B9B58160, 0x1, 0xFFFFFFFFFFFFFFFF) = 1 0

84911/0x7129e9: kevent(0xB, 0x0, 0x0) = 1 0

84926/0x712c71: poll(0x70000E767E20, 0x1, 0x0) = 0 0

84926/0x712c6e: recvfrom(0x11, 0x7FF7B9B58167, 0x1) = 1 0

84911/0x7129e9: recvfrom(0x13, 0x7FE2E980B008, 0x2000) = 9 0

84926/0x712c71: kevent(0xB, 0x0, 0x0) = 1 0

84911/0x7129e9: sendto(0xC, 0x700003B43E17, 0x1) = 1 0

```

84926/0x712c71: kevent(0xB, 0x70000E767EC0, 0x1)          = 0 0

84911/0x7129df: poll(0x7FF7B2EC6FA0, 0x1, 0xFFFFFFFFFFFFFFFF) = 1 0

84926/0x712c6e: poll(0x7FF7B9B58160, 0x1, 0x0)            = 0 0

84911/0x7129df: recvfrom(0xD, 0x7FF7B2EC6FA7, 0x1)        = 1 0

84911/0x7129df: poll(0x7FF7B2EC6FA0, 0x1, 0x0)            = 0 0

84911/0x7129df: sendto(0x9, 0x7FF7B2EC6ED7, 0x1)          = 1 0

84911/0x7129e9: kevent(0xB, 0x0, 0x0)                      = 1 0

84911/0x7129e9: poll(0x700003B43E20, 0x1, 0x0)            = 1 0

84911/0x7129e9: recvfrom(0xA, 0x700003B43E27, 0x1)          = 1 0

84911/0x7129df: fstat64(0x1, 0x7FF7B2EC6FE8, 0x0)         = 0 0

84911/0x7129e9: poll(0x700003B43E20, 0x1, 0x0)            = 0 0

84911/0x7129df: ioctl(0x1, 0x4004667A, 0x7FF7B2EC7034)    = 0 0

dtrace: error on enabled probe ID 1712 (ID 963: syscall::write_nocancel:return): invalid kernel access in action #13 at DIF offset 68

exec 13 myVal 10

OK:13

dtrace: error on enabled probe ID 1714 (ID 961: syscall::read_nocancel:return): invalid kernel access in action #13 at DIF offset 68

84911/0x7129df: poll(0x7FF7B2EC6DE0, 0x1, 0x0)            = 0 S_labs_3t/lab5-7/build/client0

84911/0x7129df: sendto(0x9, 0x7FF7B2EC6D17, 0x1)          = 1 lient0

84911/0x7129e9: kevent(0xB, 0x0, 0x0)                      = 1 0

84911/0x7129e9: poll(0x700003B43E20, 0x1, 0x0)            = 1 0

84911/0x7129e9: recvfrom(0xA, 0x700003B43E27, 0x1)          = 1 0

84911/0x7129e9: kevent(0xB, 0x700003B43E10, 0x1)          = 0 0

84911/0x7129e9: sendto(0x13, 0x7FE2E9809000, 0xB)          = 11 0

84911/0x7129e9: poll(0x700003B43E20, 0x1, 0x0)            = 0 0

84926/0x712c71: kevent(0xB, 0x0, 0x0)                      = 1 0

84911/0x7129e9: kevent(0xB, 0x0, 0x0)                      = 1 0

84911/0x7129e9: kevent(0xB, 0x700003B43EC0, 0x1)          = 0 0

84926/0x712c71: recvfrom(0x12, 0x7F7E6C008A08, 0x2000)    = 11 0

84926/0x712c71: sendto(0x10, 0x70000E767E17, 0x1)        = 1 0

84926/0x712c6e: poll(0x7FF7B9B58160, 0x1, 0xFFFFFFFFFFFFFFFF) = 1 0

84926/0x712c6e: recvfrom(0x11, 0x7FF7B9B58167, 0x1)        = 1 0

84926/0x712c6e: poll(0x7FF7B9B58160, 0x1, 0x0)            = 0 0

```

84926/0x712c6e: poll(0x7FF7B9B581A0, 0x1, 0x0) = 0 0

84926/0x712c6e: sendto(0x9, 0x7FF7B9B58157, 0x1) = 1 0

84926/0x712c71: kevent(0xB, 0x0, 0x0) = 1 0

84926/0x712c71: poll(0x70000E767E20, 0x1, 0x0) = 1 0

84926/0x712c71: recvfrom(0xA, 0x70000E767E27, 0x1) = 1 0

84926/0x712c71: kevent(0xB, 0x70000E767E10, 0x1) = 0 0

84926/0x712c71: sendto(0x12, 0x7F7E6C808200, 0x9) = 9 0

84926/0x712c71: poll(0x70000E767E20, 0x1, 0x0) = 0 0

84911/0x7129e9: kevent(0xB, 0x0, 0x0) = 1 0

84926/0x712c71: kevent(0xB, 0x0, 0x0) = 1 0

84926/0x712c71: kevent(0xB, 0x70000E767EC0, 0x1) = 0 0

84911/0x7129e9: recvfrom(0x13, 0x7FE2E980B008, 0x2000) = 9 0

84911/0x7129e9: sendto(0xC, 0x700003B43E17, 0x1) = 1 0

84911/0x7129df: poll(0x7FF7B2EC6DA0, 0x1, 0xFFFFFFFFFFFFFFFF) = 1 0

84911/0x7129df: recvfrom(0xD, 0x7FF7B2EC6DA7, 0x1) = 1 0

84911/0x7129df: poll(0x7FF7B2EC6DA0, 0x1, 0x0) = 0 0

84911/0x7129df: sendto(0x9, 0x7FF7B2EC6E17, 0x1) = 1 0

84911/0x7129e9: kevent(0xB, 0x0, 0x0) = 1 0

84911/0x7129e9: poll(0x700003B43E20, 0x1, 0x0) = 1 0

84911/0x7129e9: recvfrom(0xA, 0x700003B43E27, 0x1) = 1 0

84911/0x7129e9: kevent(0xB, 0x700003B43E10, 0x1) = 0 0

84911/0x7129e9: sendto(0x13, 0x7FE2E9809000, 0x12) = 18 0

84926/0x712c71: kevent(0xB, 0x0, 0x0) = 1 0

84911/0x7129e9: poll(0x700003B43E20, 0x1, 0x0) = 0 0

84926/0x712c71: recvfrom(0x12, 0x7F7E6C008A08, 0x2000) = 18 0

84911/0x7129e9: kevent(0xB, 0x0, 0x0) = 1 0

84911/0x7129e9: kevent(0xB, 0x700003B43EC0, 0x1) = 0 0

84926/0x712c71: sendto(0x10, 0x70000E767E17, 0x1) = 1 0

84926/0x712c6e: poll(0x7FF7B9B58160, 0x1, 0xFFFFFFFFFFFFFFFF) = 1 0

84926/0x712c6e: recvfrom(0x11, 0x7FF7B9B58167, 0x1) = 1 0

84926/0x712c6e: poll(0x7FF7B9B58160, 0x1, 0x0) = 0 0

84926/0x712c6e: sendto(0x9, 0x7FF7B9B58157, 0x1) = 1 0

```

84926/0x712c71: kevent(0xB, 0x0, 0x0)      = 1 /build/Info.plist0

84926/0x712c71: poll(0x70000E767E20, 0x1, 0x0)      = 1 0

84926/0x712c71: recvfrom(0xA, 0x70000E767E27, 0x1)      = 1 0

84926/0x712c71: kevent(0xB, 0x70000E767E10, 0x1)      = 0

0

84926/0x712c71: sendto(0x12, 0x7F7E6C808200, 0x9)      = 9 0

84911/0x7129e9: kevent(0xB, 0x0, 0x0)      = 1 0

84926/0x712c71: poll(0x70000E767E20, 0x1, 0x0)      = 0 0

84911/0x7129e9: recvfrom(0x13, 0x7FE2E980B008, 0x2000)      = 9 0

84926/0x712c71: kevent(0xB, 0x0, 0x0)      = 1 0

84911/0x7129e9: sendto(0xC, 0x700003B43E17, 0x1)      = 1 0

84926/0x712c71: kevent(0xB, 0x70000E767EC0, 0x1)      = 0 0

84911/0x7129df: poll(0x7FF7B2EC6EA0, 0x1, 0xFFFFFFFFFFFFFFFF)      = 1 0

84911/0x7129df: recvfrom(0xD, 0x7FF7B2EC6EA7, 0x1)      = 1 0

84911/0x7129df: poll(0x7FF7B2EC6EA0, 0x1, 0x0)      = 0 0

```

kill

dttrace: error on enabled probe ID 1714 (ID 961: syscall::read\_nocancel:return): invalid kernel access in action #13 at DIF offset 68

```

84911/0x7129df: poll(0x7FF7B2EC6F20, 0x1, 0x0)      = 0 0

84911/0x7129df: sendto(0x9, 0x7FF7B2EC6E57, 0x1)      = 1 0

84911/0x7129e9: kevent(0xB, 0x0, 0x0)      = 1 0

84911/0x7129e9: poll(0x700003B43E20, 0x1, 0x0)      = 1 10

84911/0x7129e9: recvfrom(0xA, 0x700003B43E27, 0x1)      = 1 0

84911/0x7129e9: kevent(0xB, 0x700003B43E10, 0x1)      = 0 0

84911/0x7129e9: sendto(0x13, 0x7FE2E9809000, 0xB)      = 11 0

84911/0x7129e9: poll(0x700003B43E20, 0x1, 0x0)      = 0 0

84926/0x712c71: kevent(0xB, 0x0, 0x0)      = 1 0

84911/0x7129e9: kevent(0xB, 0x0, 0x0)      = 1 0

84911/0x7129e9: kevent(0xB, 0x700003B43EC0, 0x1)      = 0 0

84926/0x712c71: recvfrom(0x12, 0x7F7E6C008A08, 0x2000)      = 11 0

84926/0x712c71: sendto(0x10, 0x70000E767E17, 0x1)      = 1 0

84926/0x712c6e: poll(0x7FF7B9B58160, 0x1, 0xFFFFFFFFFFFFFFFF)      = 1 0

84926/0x712c6e: recvfrom(0x11, 0x7FF7B9B58167, 0x1)      = 1 0

```

84926/0x712c6e: poll(0x7FF7B9B58160, 0x1, 0x0) = 0 0

84926/0x712c6e: poll(0x7FF7B9B581A0, 0x1, 0x0) = 0 0

84926/0x712c6e: sendto(0x9, 0x7FF7B9B58157, 0x1) = 1 0

84926/0x712c71: kevent(0xB, 0x0, 0x0) = 1 0

84926/0x712c71: poll(0x70000E767E20, 0x1, 0x0) = 1 0

84926/0x712c71: recvfrom(0xA, 0x70000E767E27, 0x1) = 1 0

84926/0x712c71: kevent(0xB, 0x70000E767E10, 0x1) = 0 10

84926/0x712c71: sendto(0x12, 0x7F7E6C808200, 0x9) = 9 0

84926/0x712c71: poll(0x70000E767E20, 0x1, 0x0) = 0 0

84911/0x7129e9: kevent(0xB, 0x0, 0x0) = 1 0

84926/0x712c71: kevent(0xB, 0x0, 0x0) = 1 0

84911/0x7129e9: recvfrom(0x13, 0x7FE2E980B008, 0x2000) = 9 0

84926/0x712c71: kevent(0xB, 0x70000E767EC0, 0x1) = 0 0

84911/0x7129e9: sendto(0xC, 0x700003B43E17, 0x1) = 1 0

84911/0x7129df: poll(0x7FF7B2EC6EE0, 0x1, 0xFFFFFFFFFFFFFFFF) = 1 0

84911/0x7129df: recvfrom(0xD, 0x7FF7B2EC6EE7, 0x1) = 1 0

84911/0x7129df: poll(0x7FF7B2EC6EE0, 0x1, 0x0) = 0 0

84911/0x7129df: sendto(0x9, 0x7FF7B2EC6F57, 0x1) = 1 0

84911/0x7129e9: kevent(0xB, 0x0, 0x0) = 1 0

84911/0x7129e9: poll(0x700003B43E20, 0x1, 0x0) = 1 0

84911/0x7129e9: recvfrom(0xA, 0x700003B43E27, 0x1) = 1 0

84911/0x7129e9: kevent(0xB, 0x700003B43E10, 0x1) = 0 0

84911/0x7129e9: sendto(0x13, 0x7FE2E9809000, 0xA) = 10 0

84911/0x7129e9: poll(0x700003B43E20, 0x1, 0x0) = 0 0

84926/0x712c71: kevent(0xB, 0x0, 0x0) = 1 0

84911/0x7129e9: kevent(0xB, 0x0, 0x0) = 1 0

84911/0x7129e9: kevent(0xB, 0x700003B43EC0, 0x1) = 0 0

84926/0x712c71: recvfrom(0x12, 0x7F7E6C008A08, 0x2000) = 10 0

84926/0x712c71: sendto(0x10, 0x70000E767E17, 0x1) = 1 0

84926/0x712c6e: poll(0x7FF7B9B58160, 0x1, 0xFFFFFFFFFFFFFFFF) = 1 0

84926/0x712c6e: recvfrom(0x11, 0x7FF7B9B58167, 0x1) = 1 0

84926/0x712c6e: poll(0x7FF7B9B58160, 0x1, 0x0) = 0 0

84926/0x712c6e: sendto(0x9, 0x7FF7B9B58157, 0x1) = 1 0

84926/0x712c71: kevent(0xB, 0x0, 0x0) = 1 0

84926/0x712c71: poll(0x70000E767E20, 0x1, 0x0) = 1 0

84926/0x712c6e: poll(0x7FF7B9B58160, 0x1, 0x0) = 0 0

84926/0x712c71: recvfrom(0xA, 0x70000E767E27, 0x1) = 1 0

84926/0x712c71: kevent(0xB, 0x70000E767E10, 0x1) = 0 0

84926/0x712c6e: sendto(0x6, 0x7FF7B9B58297, 0x1) = 1 0

84926/0x712c71: sendto(0x12, 0x7F7E6C808200, 0x6) = 6 0

84926/0x712c70: kevent(0x8, 0x0, 0x0) = 1 0

84926/0x712c71: sendto(0x10, 0x70000E767D97, 0x1) = 1 0

84926/0x712c70: poll(0x70000E6E4E20, 0x1, 0x0) = 1 0

84911/0x7129e9: kevent(0xB, 0x0, 0x0) = 1 0

84926/0x712c70: recvfrom(0x7, 0x70000E6E4E27, 0x1) = 1 0

84911/0x7129e9: recvfrom(0x13, 0x7FE2E980B008, 0x2000) = 6 0

84926/0x712c71: poll(0x70000E767E20, 0x1, 0x0) = 0 0

84926/0x712c70: kevent(0x8, 0x70000E6E4DE0, 0x1) = 0 0

84911/0x7129e9: sendto(0xC, 0x700003B43E17, 0x1) = 1 0

84926/0x712c71: kevent(0xB, 0x0, 0x0) = 1 0

84911/0x7129df: poll(0x7FF7B2EC6FE0, 0x1, 0xFFFFFFFFFFFFFFFF) = 1 0

84926/0x712c71: kevent(0xB, 0x70000E767EC0, 0x1) = 0 0

84926/0x712c70: poll(0x70000E6E4E20, 0x1, 0x0) = 0 0

84926/0x712c70: kevent(0x8, 0x0, 0x0) = 1 0

84911/0x7129df: recvfrom(0xD, 0x7FF7B2EC6FE7, 0x1) = 1 0

84926/0x712c70: poll(0x70000E6E4DE0, 0x1, 0x0) = 1 0

84926/0x712c70: recvfrom(0x11, 0x70000E6E4DE7, 0x1) = 1 0

84911/0x7129df: poll(0x7FF7B2EC6FE0, 0x1, 0x0) = 0 0

84926/0x712c70: sendto(0x9, 0x70000E6E4CD7, 0x1) = 1 0

84926/0x712c71: kevent(0xB, 0x0, 0x0) = 1 0

84911/0x7129df: poll(0x7FF7B2EC6FA0, 0x1, 0x0) = 0 0

84926/0x712c71: poll(0x70000E767E20, 0x1, 0x0) = 1 0

84926/0x712c70: poll(0x70000E6E4DE0, 0x1, 0x0) = 0 0

84911/0x7129df: sendto(0x9, 0x7FF7B2EC6FD7, 0x1) = 1 0



84911/0x7129e9: kevent(0xB, 0x0, 0x0) = 1 0

84926/0x712c71: recvfrom(0xA, 0x70000E767E27, 0x1) = 1 0

84911/0x7129e9: poll(0x700003B43E20, 0x1, 0x0) = 1 0

84926/0x712c71: sendto(0x10, 0x70000E767C97, 0x1) = 1 0

84911/0x7129df: sendto(0x6, 0x7FF7B2EC7117, 0x1) = 1 0

84926/0x712c70: kevent(0x8, 0x0, 0x0) = 1 0

84911/0x7129e9: recvfrom(0xA, 0x700003B43E27, 0x1) = 1 0

84926/0x712c71: kevent(0xB, 0x70000E767CA0, 0x1) = 0 0

84911/0x7129e8: kevent(0x8, 0x0, 0x0) = 1 0

84926/0x712c70: poll(0x70000E6E4DE0, 0x1, 0x0) = 1 0

84911/0x7129e9: kevent(0xB, 0x700003B43DF0, 0x1) = 0 0

84911/0x7129e8: poll(0x700003AC0E20, 0x1, 0x0) = 1 0

84911/0x7129df: sendto(0xC, 0x7FF7B2EC7057, 0x1) = 1 0

84926/0x712c71: close(0x12) = 0 0

84926/0x712c70: recvfrom(0x11, 0x70000E6E4DE7, 0x1) = 1 0

84911/0x7129df: sendto(0xE, 0x7FF7B2EC7057, 0x1) = 1 0

84911/0x7129e8: recvfrom(0x7, 0x700003AC0E27, 0x1) = 1 0

84911/0x7129df: sendto(0x10, 0x7FF7B2EC7057, 0x1) = 1 0

84911/0x7129e9: close(0x12) = 0 0

84911/0x7129e8: kevent(0x8, 0x700003AC0DE0, 0x1) = 0 0

84926/0x712c70: poll(0x70000E6E4DE0, 0x1, 0x0) = 0 0

84911/0x7129e8: kevent(0x8, 0x700003AC0DE0, 0x1) = 0 0

84911/0x7129e9: kevent(0xB, 0x700003B43E10, 0x1) = 0 0

84926/0x712c71: poll(0x70000E767E20, 0x1, 0x0) = 0 0

84926/0x712c70: kevent(0x8, 0x70000E6E4E90, 0x1) = 0 0

84911/0x7129e8: kevent(0x8, 0x700003AC0DA0, 0x1) = 0 0

84911/0x7129e9: kevent(0xB, 0x700003B43E00, 0x1) = 0 0

84911/0x7129e8: close(0x10) = 0 0

84911/0x7129e9: poll(0x700003B43E20, 0x1, 0x0) = 0 0

84911/0x7129e8: close(0x11) = 0 0

84926/0x712c70: sendto(0x6, 0x70000E6E4E17, 0x1) = 1 0

84911/0x7129e9: kevent(0xB, 0x0, 0x0) = 1 0

84926/0x712c70: close(0x10) = 0 0

84911/0x7129e8: kevent(0x8, 0x700003AC0DE0, 0x1) = 0 0

84911/0x7129e9: recvfrom(0x13, 0x7FE2E980B008, 0x2000) = 0 0

84926/0x712c70: close(0x11) = 0 0

84911/0x7129e8: kevent(0x8, 0x700003AC0DA0, 0x1) = 0 0

84911/0x7129e9: kevent(0xB, 0x700003B43DE0, 0x1) = 0 0

84911/0x7129e8: close(0xE) = 0 0

84926/0x712c70: kevent(0x8, 0x0, 0x0) = 1 0

84911/0x7129e8: close(0xF) = 0 0

84911/0x7129e9: close(0x13) = 0 0

84926/0x712c70: poll(0x70000E6E4E20, 0x1, 0x0) = 1 0

84911/0x7129e8: poll(0x700003AC0E20, 0x1, 0x0) = 0 0

84926/0x712c70: recvfrom(0x7, 0x70000E6E4E27, 0x1) = 1 0

84911/0x7129e8: kevent(0x8, 0x0, 0x0) = 1 0

84911/0x7129e8: poll(0x700003AC0DE0, 0x1, 0x0) = 1 0

84911/0x7129e8: recvfrom(0xD, 0x700003AC0DE7, 0x1) = 1 0

84926/0x712c70: poll(0x70000E6E4E20, 0x1, 0x0) = 0 0

84911/0x7129e8: sendto(0x9, 0x700003AC0CD7, 0x1) = 1 0

84911/0x7129e9: kevent(0xB, 0x0, 0x0) = 1 0

84911/0x7129e9: poll(0x700003B43E20, 0x1, 0x0) = 1 0

84911/0x7129e8: poll(0x700003AC0DE0, 0x1, 0x0) = 0 0

84911/0x7129e9: recvfrom(0xA, 0x700003B43E27, 0x1) = 1 0

84911/0x7129e9: sendto(0xC, 0x700003B43D97, 0x1) = 1 0

84911/0x7129e8: kevent(0x8, 0x0, 0x0) = 1 0

84911/0x7129e8: poll(0x700003AC0DE0, 0x1, 0x0) = 1 0

84911/0x7129e9: poll(0x700003B43E20, 0x1, 0x0) = 0 0

84911/0x7129e8: recvfrom(0xD, 0x700003AC0DE7, 0x1) = 1 0

84911/0x7129e8: poll(0x700003AC0DE0, 0x1, 0x0) = 0 0

84911/0x7129e8: kevent(0x8, 0x700003AC0E90, 0x1) = 0 0

84911/0x7129e8: sendto(0x6, 0x700003AC0DD7, 0x1) = 1 0

84911/0x7129e8: close(0xC) = 0 0

84911/0x7129e8: close(0xD) = 0 0

```

84911/0x7129e8: kevent(0x8, 0x0, 0x0)      = 1 0

84911/0x7129e8: poll(0x700003AC0E20, 0x1, 0x0)    = 1 0

84911/0x7129e8: recvfrom(0x7, 0x700003AC0E27, 0x1)    = 1 0

84911/0x7129e8: sendto(0x3, 0x700003AC0D97, 0x1)    = 1 0

84911/0x7129e8: kevent(0x8, 0x700003AC0DF0, 0x1)    = 0 0

84911/0x7129df: poll(0x7FF7B2EC70E0, 0x1, 0xFFFFFFFFFFFFFFFF)    = 1 0

84911/0x7129e8: poll(0x700003AC0E20, 0x1, 0x0)      = 0 0

84911/0x7129e8: __disable_threadsignal(0x1, 0x0, 0x0)    = 0 0

84911/0x7129df: recvfrom(0x4, 0x7FF7B2EC70E7, 0x1)    = 1 0

84911/0x7129df: sendto(0x9, 0x7FF7B2EC7017, 0x1)    = 1 0

84911/0x7129e9: kevent(0xB, 0x0, 0x0)      = 1 0

84911/0x7129e9: poll(0x700003B43E20, 0x1, 0x0)    = 1 0

84911/0x7129e9: recvfrom(0xA, 0x700003B43E27, 0x1)    = 1 0

84911/0x7129e9: kevent(0xB, 0x700003B43DE0, 0x1)    = 0 0

84911/0x7129e9: poll(0x700003B43E20, 0x1, 0x0)    = 0 0

84911/0x7129e9: __disable_threadsignal(0x1, 0x0, 0x0)    = 0 0

84911/0x7129e9: ulock_wake(0x1000002, 0x700003B46034, 0x0)    = 0 0

84911/0x7129df: ulock_wait(0x1020002, 0x700003B46034, 0x90B)    = 0 0

84911/0x7129df: close(0xB)      = 0 0

84911/0x7129df: close(0x9)      = 0 0

84911/0x7129df: close(0xA)      = 0 0

84911/0x7129df: close(0x8)      = 0 0

84911/0x7129df: close(0x6)      = 0 0

84911/0x7129df: close(0x7)      = 0 0

84911/0x7129df: close(0x5)      = 0 0

84911/0x7129df: close(0x3)      = 0 0

84911/0x7129df: close(0x4)      = 0 0

84911/0x7129df: lseek(0x0, 0xFFFFFFFFFFFFFFFF, 0x1)    = 20657735 0

```

## **Вывод**

В результате выполнения лабораторной работы я получил практические навыки в: управлении серверами сообщений (с использованием zero message queue); применении отложенных вычислений; взаимодействии программных систем друг с другом.