

Laboratorium 12

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Zadanie 1

statemachine.h:

```
#pragma once
```

```
void exec();
```

reader.h:

```
#pragma once
```

```
char readChar();
```

reader.c:

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

```
#include "reader.h"
```

```
char readChar() {
```

```
    char character;
```

```
    while ((character = getchar()) == '\n' ||  
character == EOF) {}
```

```
    return character;
```

```
}
```

state.h:

```
#pragma once
```

```
void echo(char znak);
```

```
void write(char znak);
```

state.c:

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

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

```
#include "state.h"
```

```
void echo(char znak){
```

```
    printf("%c",znak);
```

```
}
```

```
void write(char znak){
```

```
    FILE * fptr = fopen("output.txt", "a");
```

```
    fprintf(fptr, "%c" ,znak);
```

```
    fclose (fptr);
```

```
}
```

main.c:

```
#include "statemachine.h"
```

```
#include "reader.c"
```

```
#include "state.c"
```

```
int main()
```

```
{
```

```
    exec();
```

```
    return 0;
```

```
}
```

```
void exec()
```

```
{
```

```
    char stan = 'e';
```

```
    char przejście = 'e';
```

```
    while (przejście != 'q')
```

```
    {
```

```
        przejście = readChar();
```

```
        switch(stan)
```

```
        {
```

```
            case 'e':
```

```
                switch(przejście)
```

```
                {
```

```
                    case 'w':
```

```
                        stan='w';
```

```
                        write(przejście);
```

```
                        break;
```

```
                    case 'q':
```

```
                        return;
```

```
                        break;
```

```
                    default:
```

```
                        echo(przejście);
```

```
                        break;
```

```
                }
```

```
            break;
```

```
        case 'w':
```

```
            switch(przejście)
```

```
            {
```

```
                case 'e':
```

```
                    stan='e';
```

```
                    echo(przejście);
```

```
                    break;
```

```
                case 'q':
```

```
                    return;
```

```
                    break;
```

```
                default:
```

```
                    write(przejście);
```

```
                    break;
```

```
            }
```

```
        break;
```

```
    }
```

```
}
```

```
}
```