

**Lab 5 Ex. 2b)**

**Pseudokod:**

```
char znak:  
  
FILE *INPUT, *OUTPUT  
  
INPUT = open data.txt, read  
OUTPUT = open result.txt, write  
  
znak: = first char from INPUT  
while znak: != EOF do  
begin  
  if (znak: == 'a') then  
    for (;;)  
      write znak: in OUTPUT  
      znak: = next char from INPUT  
      if (znak: == ' ' or znak: == '\n' or znak: == EOF) then  
        if znak: == ' ' then write ' ' in OUTPUT  
        if znak: == '\n' then begin new line in OUTPUT  
        znak: = next char from INPUT  
        break  
      if (znak: != 'a' and znak: != '\n' and znak: != EOF) then  
        for (;;)  
          znak: = next char from INPUT  
          if (znak: == ' ' or znak: == '\n' or znak: == EOF) then  
            if znak: == '\n' then begin new line in OUTPUT  
            znak: = next char from INPUT  
            break  
        if (znak: == '\n') then  
          begin new line in OUTPUT  
          znak: = next char from INPUT  
end  
close INPUT  
close OUTPUT
```

## Implementacja w C:

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

int main()
{
    char str;

    FILE *in, *out;
    in = fopen("data.txt", "r");
    out = fopen("result.txt", "w");

    if(in == NULL)
    {
        printf("Wystapil blad - brak pliku zrodlowego.");
        exit(1);
    }

    str = fgetc(in);
    while (str != EOF) {

        if (str == 'a') {
            for (;;) {
                fprintf(out, "%c", str);
                str = fgetc(in);
                if (str == ' ' || str =='\\n' || str == EOF) {
                    if (str == ' ') {fprintf(out, " ");}
                    if (str == '\\n') {fprintf(out, "\\n");}
                    str = fgetc(in);
                    break;
                }
            }
        }
        if (str != 'a' && str != '\\n' && str != EOF) {
            for (;;) {
                str = fgetc(in);
                if (str == ' ' || str =='\\n' || str == EOF) {
                    if (str == '\\n') {fprintf(out, "\\n");}
                    str = fgetc(in);
                    break;
                }
            }
        }

        if (str == '\\n') {
            fprintf(out, "\\n");
            str = fgetc(in);
        }
    }

    fclose(in);
    fclose(out);
    return 0;
}
```