

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

```
#define MAXPAROLA 30
#define MAXRIGA 80
```

```
int main(int argc, char *argv[])
{
    int freq[MAXPAROLA]; /* vettore di contatori
delle frequenze delle lunghezze delle parole */
    char riga[MAXRIGA];
    int i, inizio, lunghezza;
    FILE *f;
```

```
for(i=0; i<MAXPAROLA; i++)
    freq[i]=0;
```

```
if(argc != 2)
```

```
{
    fprintf(stderr, "ERRORE, serve un parametro con il nome del file\n");
    exit(1);
}
```

```
f = fopen(argv[1], "r");
if(f==NULL)
```

```
{
    fprintf(stderr, "ERRORE, impossibile aprire il file %s\n", argv[1]);
    exit(1);
}
```

```
while( fgets( riga, MAXRIGA, f ) != NULL )
```



Graphs

References

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References

- ❖ Connected components
 - Sedgewick Part 5 18.5
- ❖ Bridge and articulation points
 - Sedgewick Part 5 18.6
- ❖ DAGs and DAG topological sorting
 - Sedgewick Part 5 19.5 e 19.6
 - Cormen 23.4
- ❖ Strongly connected components
 - Sedgewick Part 5 19.8
 - Cormen 23.5

References

❖ Representation

- Sedgewick Part 5 20.1

❖ Principles

- Sedgewick Part 5 20.2
- Cormen 24.1

❖ Kruskal's Algorithm

- Sedgewick Part 5 20.4
- Cormen 24.2

❖ Prim's Algorithm

- Sedgewick Part 5 20.3
- Cormen 24.2

References

- ❖ General principle
 - Sedgewick Part 5 21.1
 - Cormen 25.1
- ❖ Dijkstra's Algorithm
 - Sedgewick Part 5 21.2
 - Cormen 25.2
- ❖ Minimum and Maximum Paths on DAG
 - Sedgewick Part 5 21.4
 - Cormen 25.4

References

- ❖ Bellman-Ford's Algorithm
 - Sedgewick Part 5 21.7
 - Cormen 25.3