

**LAPORAN TUGAS KECIL 1**  
**IF2211 STRATEGI ALGORITMA**  
**Penyelesaian *Word Search Puzzle* dengan Algoritma**  
***Brute Force***



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## **1. PENJELASAN ALGORITMA *BRUTE FORCE***

Algoritma yang saya lakukan yaitu melakukan loop terhadap soal (baris dan kolom) lalu didalam loop itu saya lakukan lagi loop jawaban (baris dan kolom juga). Lalu saya melakukan perbandingan antara huruf depan dari jawaban dan setiap huruf dari soal. Jika ada huruf yang sama dengan huruf depan dari jawaban, maka akan dilakukan pengecekan pada 8 arah yaitu kanan, kiri, atas, bawah, kanan atas, kanan bawah, kiri atas, dan kiri bawah. Masing masing arah akan mengecek huruf kedua dari jawaban. Jika salah satu arah salah, maka akan dilanjutkan dengan pengecekan ke arah lainnya. Jika arah benar, maka setiap index akan disimpan didalam array untuk kemudian di print dengan warna yang berbeda bila jawaban sudah ditemukan semua.

## 2. SOURCE CODE PROGRAM

```
1 #include <iostream>
2 #include <fstream>
3 #include <string>
4 #include <vector>
5 #include <charconv>
6 #include <chrono>
7 using namespace std;
8 using namespace std::chrono;
9
10 // masukin index nya ke 2 vector berbeda aja terus nanti index yg di print nya dari 2 vector itu
11
12 bool checkIndex(int idxi, int idxj, vector<vector<int>> idsi, vector<vector<int>> idsj){
13     for(int i=0; i<idsi.size();i++){
14         for(int j=0;j<idsi[i].size();j++){
15             if(idsi[i][j]==idxi && idsj[i][j]==idxj){
16                 return true;
17             }
18         }
19     }
20     return false;
21 }
22
23 int main(){
24     int n;
25     vector<string> jawab;
26     string plc;
27     vector<char> ans;
28     vector<string> soal;
29     string kosong;
30     vector<int> indexi;
31     vector<int> indexj;
32     vector<vector<int>> indicesi;
33     vector<vector<int>> indicesj;
34     int check = 0;
35     int huruf = 0;
36     string filename;
37
38     // input dari user
39     cout << "Masukkan nama file (spesifik dengan tempatnya): ";
40
41     cin >> filename;
42     ifstream myfile(filename);
43
44     cout << "Masukan banyak baris soal: ";
45     cin >> n;
46     // Ambil data dari file & parsing
47     if(!myfile){
48         cout << "Error opening output file" << endl;
49         system("pause");
50         return -1;
51     }
52     for(int i = 0; i<n;i++){
53         getline(myfile, kosong, '\n');
54         soal.push_back(kosong);
55     }
56
57     for(int i = 0; i<n;i++){
58         for(int j = 0; j<soal[i].size();j++){
59             if(soal[i][j] == ' '){
60                 soal[i].erase(j,1);
61             }
62         }
63     }
64
65     for(int k = 0; k<2;k++){
66         getline(myfile, kosong, '\n');
67     }
68
69     int i = 0;
70     while(getline(myfile, plc, '\n')){
71         jawab.push_back(plc);
72         i++;
73     }
74
75     auto start = high_resolution_clock::now();
76
77     for(int i = 0; i<jawab.size();i++){ // looping jawaban ke bawah
```

```

79     int count = 0;
80     ans.clear();
81     indexi.clear();
82     indexj.clear();
83     int j = 0;
84     for(int k=0;k<soal.size();k++){ // looping soal ke bawah
85         ans.clear();
86         indexi.clear();
87         indexj.clear();
88         count = 0;
89         for(int l=0;l<soal[0].length();l++){ // looping soal ke samping
90             ans.clear();
91             indexi.clear();
92             indexj.clear();
93             count = 0;
94             if(jawab[i][j] == soal[k][l]){ // kalo jawaban sama dengan soal
95                 huruf += 1;
96                 if(jawab[i][j+1] == soal[k][l+1] && jawab[i][j+2] == soal[k][l+2] && j != jawab[i].length()-1){ // kalo jawaban+1 sama dengan soal
97                     huruf += 1;
98                     for(int m=0;m<jawab[i].length();m++){ // looping jawaban ke samping
99                         for(int n=l;n<soal[0].length();n++){ // looping soal ke samping
100                             n += count;
101                             if(jawab[i][m] == soal[k][n]){
102                                 huruf += 1;
103                                 indexi.push_back(k);
104                                 indexj.push_back(n);
105                                 ans.push_back(soal[k][n]); // disini
106                                 n = soal[0].length();
107                                 count++;
108                                 if(count == jawab[i].length()){
109                                     l = soal[0].length();
110                                     k = soal.size();
111                                     for(int x=0;x<ans.size();x++){
112                                         // cout << ans[x];
113                                     }
114                                     indicesi.push_back(indexi);
115                                     indicesj.push_back(indexj);
116                                     count = 0;
117                                     // cout << "\n";

```

```

118     }
119     }
120     }
121     }
122     }
123     else if(jawab[i][j+1] == soal[k][l-1] && jawab[i][j+2] == soal[k][l-2] && j != jawab[i].length()-1){ // kalo jawaban+1 sama deng
124         huruf += 1;
125         for(int m=0;m<jawab[i].length();m++){ // looping jawaban ke samping
126             for(int n=l;n>=0;n--){ // looping soal ke samping
127                 n -= count;
128                 if(jawab[i][m] == soal[k][n]){
129                     huruf += 1;
130                     indexi.push_back(k);
131                     indexj.push_back(n);
132                     ans.push_back(soal[k][n]);
133                     n = -1;
134                     count++;
135                     if(count == jawab[i].length()){
136                         l = soal[0].length();
137                         m = jawab[i].length();
138                         k = soal.size();
139                         n = -1;
140                         for(int x=0;x<ans.size();x++){
141                             // cout << ans[x];
142                         }
143                         indicesi.push_back(indexi);
144                         indicesj.push_back(indexj);
145                         count = 0;
146                         // cout << "\n";
147                     }
148                 }
149             }
150         }
151     }
152     else if(k == soal.size()-2 || k == soal.size()-1){
153         huruf +=1;
154         if((jawab[i][j+1] == soal[k-1][l]) && jawab[i][j+2] == soal[k-2][l]){
155             huruf +=1;
156             for(int m=0;m<jawab[i].length();m++){

```

```

156 for(int m=0;m<jawab[i].length();m++){
157     for(int n=k-count;n>=0;n--){
158         if(jawab[i][m] == soal[n][l] && (n!= 0 || count == jawab[i].length()-1)){
159             huruf ++;
160             indexi.push_back(n);
161             indexj.push_back(l);
162             ans.push_back(soal[n][l]);
163             n = 0;
164             count++;
165             if(count == jawab[i].length()){
166                 for(int x=0;x<ans.size();x++){
167                     // cout << ans[x];
168                 }
169                 indicesi.push_back(indexi);
170                 indicesj.push_back(indexj);
171                 count = 0;
172                 n = 0;
173                 m = jawab[i].length();
174                 l = soal[0].length();
175                 k = soal.size();
176                 // cout << "\n";
177             }
178         }
179         else if (n == 0 && count != jawab[i].length()-1){
180             n = 0;
181             m = jawab[i].length();
182         }
183     }
184 }
185
186 }
187
188 else if(jawab[i][j+1] == soal[k-1][l-1]){
189     huruf ++;
190     for(int m=0;m<jawab[i].length();m++){
191         for(int n=k;n>=0;n -= count){ // loop bawah soal
192             for(int o=1;o>=0;o--){
193                 o -= count; // loop kanan soal
194                 if(jawab[i][m] == soal[n][o] && (n!= 0 || count == jawab[i].length()-1)){

```

```

195     indexi.push_back(n);
196     indexj.push_back(o);
197     ans.push_back(soal[n][o]);
198     o = 0;
199     n = -1;
200     count++;
201     if(count == jawab[i].length()){
202         for(int x=0;x<ans.size();x++){
203             // cout << ans[x];
204         }
205         indicesi.push_back(indexi);
206         indicesj.push_back(indexj);
207         count = 0;
208         o = 0;
209         n = -1;
210         m = jawab[i].length();
211         l = soal[0].length();
212         k = soal.size();
213         // cout << "\n";
214     }
215 }
216 else if (n == 0 && count != jawab[i].length()-1){
217     o = 0;
218     n = -1;
219     m = jawab[i].length();
220 }
221 }
222 }
223 }
224 }
225 else if(jawab[i][j+1] == soal[k-1][l+1]){
226     huruf +=1;
227     for(int m=0;m<jawab[i].length();m++){
228         for(int n=k;n>=0;n-- count++){
229             for(int o=1;o<soal[0].length();o++){
230                 o += count;
231                 if(jawab[i][m] == soal[n][o] && (n!= 0 || count == jawab[i].length()-1)){
232                     huruf +=1;
233                     indexi.push_back(n);

```

```

234         indexj.push_back(o);
235         ans.push_back(soal[n][o]);
236         o = soal[0].length();
237         n = -1;
238         count++;
239         if(count == jawab[i].length()){
240             for(int x=0;x<ans.size();x++){
241                 // cout << ans[x];
242             }
243             indicesi.push_back(indexi);
244             indicesj.push_back(indexj);
245             count = 0;
246             o = soal[0].length();
247             n = -1;
248             m = jawab[i].length();
249             l = soal[0].length();
250             k = soal.size();
251             // cout << "\n";
252         }
253     }
254     else if (n == 0 && count != jawab[i].length()-1){
255         o = soal[0].length();
256         n = -1;
257         m = jawab[i].length();
258     }
259 }
260 }
261 }
262 }
263 }
264 else if(k == 0 || k == 1){
265     huruf +=1;
266     if((jawab[i][j+1] == soal[k+1][l]) && (jawab[i][j+2] == soal[k+2][l])){ // kebawah
267         huruf +=1;
268         for(int m=0;m<jawab[i].length();m++){
269             for(int n=k+count;n<soal.size();n++){
270                 if(jawab[i][m] == soal[n][l] && (n!= soal.size()-1 || count == jawab[i].length()-1)){
271                     huruf +=1;
272                     indexi.push_back(n);

```

```

273         indexj.push_back(l);
274         ans.push_back(soal[n][l]);
275         n = soal.size();
276         count++;
277         if(count == jawab[i].length()){
278             for(int x=0;x<ans.size();x++){
279                 // cout << ans[x];
280             }
281             indicesi.push_back(indexi);
282             indicesj.push_back(indexj);
283             count = 0;
284             n = soal.size();
285             m = jawab[i].length();
286             l = soal[0].length();
287             k = soal.size();
288             // cout << "\n";
289         }
290     }else if (n == soal.size()-1 && count != jawab[i].length()-1){
291         n = soal.size();
292         m = jawab[i].length();
293     }
294 }
295 }
296 }
297 else if(jawab[i][j+1] == soal[k+1][l+1] && jawab[i][j+2] == soal[k+2][l+2]){
298     huruf +=1;
299     for(int m=0;m<jawab[i].length();m++){
300         for(int n=k+count;n<soal.size();n += count){ // loop bawah soal
301             for(int o=1;o<soal[0].length();o++){
302                 o += count; // loop kanan soal
303                 if(jawab[i][m] == soal[n][o] && (n!= soal.size()-1 || count == jawab[i].length()-1)){
304                     huruf +=1;
305                     indexi.push_back(n);
306                     indexj.push_back(o);
307                     ans.push_back(soal[n][o]);
308                     o = soal[0].length();
309                     n = soal.size();
310                     count++;
311                     if(count == jawab[i].length()){

```

```

312         for(int x=0;x<ans.size();x++){
313             // cout << ans[x];
314         }
315         indicesi.push_back(indexi);
316         indicesj.push_back(indexj);
317         count = 0;
318         o = soal[0].length();
319         n = soal.size();
320         m = jawab[i].length();
321         l = soal[0].length();
322         k = soal.size();
323         // cout << "\n";
324     }
325 }
326 else if(n == soal.size()-1 && count != jawab[i].length()-1){
327     o = soal[0].length();
328     n = soal.size();
329     m = jawab[i].length();
330 }
331 }
332 }
333 }
334 }
335 else if(jawab[i][j+1] == soal[k+1][l-1] && jawab[i][j+2] == soal[k+2][l-2]){
336     huruf +=1;
337     for(int m=0;m<jawab[i].length();m++){
338         for(int n=k+count;n<soal.size();n += count){
339             for(int o=1;o>=0;o--){
340                 o -= count;
341                 if(jawab[i][m] == soal[n][o] && (n!= soal.size()-1 || count == jawab[i].length()-1)){
342                     huruf +=1;
343                     indexi.push_back(n);
344                     indexj.push_back(o);
345                     ans.push_back(soal[n][o]);
346                     o = -1;
347                     n = soal.size();
348                     count ++;
349                     if(count == jawab[i].length()){
350                         for(int x=0;x<ans.size();x++){

```

```

351             // cout << ans[x];
352         }
353         indicesi.push_back(indexi);
354         indicesj.push_back(indexj);
355         count = 0;
356         o = -1;
357         n = soal.size();
358         m = jawab[i].length();
359         l = soal[0].length();
360         k = soal.size();
361         // cout << "\n";
362     }
363 }
364 else if(n == soal.size()-1 && count != jawab[i].length()-1){
365     o = 0;
366     n = soal.size();
367     m = jawab[i].length();
368 }
369 }
370 }
371 }
372 }
373 }
374 else{
375     huruf +=1;
376     if((jawab[i][j+1] == soal[k-1][l] && jawab[i][j+2] == soal[k-2][l])){ // kebawah
377         huruf +=1;
378         for(int m=0;m<jawab[i].length();m++){
379             for(int n=k-count;n>=0;n--){
380                 if(jawab[i][m] == soal[n][l] && (n!= 0 || count == jawab[i].length()-1)){
381                     indexi.push_back(n);
382                     indexj.push_back(l);
383                     ans.push_back(soal[n][l]);
384                     n = 0;
385                     count++;
386                     if(count == jawab[i].length()){
387                         for(int x=0;x<ans.size();x++){
388                             // cout << ans[x];
389                         }

```

```

390         indicesi.push_back(indexi);
391         indicesj.push_back(indexj);
392         count = 0;
393         n = 0;
394         m = jawab[i].length();
395         l = soal[0].length();
396         k = soal.size();
397         // cout << "\n";
398     }
399 }
400 else if (n == 0 && count != jawab[i].length()-1){
401     n = 0;
402     m = jawab[i].length();
403 }
404 }
405 }
406 }
407 else if(jawab[i][j+1] == soal[k-1][l-1] && jawab[i][j+2] == soal[k-2][l-2]){ // kiri bawah
408     huruf +=1;
409     for(int m=0;m<jawab[i].length();m++){
410         for(int n=k-count;n>=0;n -= count){ // loop bawah soal
411             for(int o=1;o>=0;o--){
412                 o -= count; // loop kanan soal
413                 if(jawab[i][m] == soal[n][o] && (n!= 0 || count == jawab[i].length()-1)){
414                     huruf +=1;
415                     indexi.push_back(n);
416                     indexj.push_back(o);
417                     ans.push_back(soal[n][o]);
418                     o = -1;
419                     n = -1;
420                     count++;
421                     if(count == jawab[i].length()){
422                         for(int x=0;x<ans.size();x++){
423                             // cout << ans[x];
424                         }
425                         indicesi.push_back(indexi);
426                         indicesj.push_back(indexj);
427                         count = 0;
428                         o = 0;

```

```

429         n = -1;
430         m = jawab[i].length();
431         l = soal[0].length();
432         k = soal.size();
433         // cout << "\n";
434     }
435 }
436 else if(n == 0 && count != jawab[i].length()-1){
437     n = -1;
438     o = 0;
439     m = jawab[i].length();
440 }
441 }
442 }
443 }
444 }
445 else if(jawab[i][j+1] == soal[k-1][l+1] && jawab[i][j+2] == soal[k-2][l+2]){
446     huruf +=1;
447     for(int m=0;m<jawab[i].length();m++){
448         for(int n=k-count;n>=0;n -= count){
449             for(int o=1;o<soal[0].length();o++){
450                 o += count;
451                 if(jawab[i][m] == soal[n][o] && (n!= 0 || count == jawab[i].length()-1)){
452                     huruf +=1;
453                     indexi.push_back(n);
454                     indexj.push_back(o);
455                     ans.push_back(soal[n][o]);
456                     o = soal[0].length();
457                     n = -1;
458                     count ++;
459                     if(count == jawab[i].length()){
460                         for(int x=0;x<ans.size();x++){
461                             // cout << ans[x];
462                         }
463                         indicesi.push_back(indexi);
464                         indicesj.push_back(indexj);
465                         count = 0;
466                         o = soal[0].length();
467                         n = -1;

```



```

467         n = -1;
468         m = jawab[i].length();
469         l = soal[0].length();
470         k = soal.size();
471         // cout << "\n";
472     }
473 }
474 else if(n == 0 && count != jawab[i].length()-1){
475     o = soal[0].length();
476     n = 0;
477     m = jawab[i].length();
478 }
479 }
480 }
481 }
482 }
483 }
484 else if((jawab[i][j+1] == soal[k+1][l] && jawab[i][j+2] == soal[k+2][l])){ // kebawah
485     huruf +=1;
486     for(int m=0;m<jawab[i].length();m++){
487         for(int n=k;count<n<soal.size();n++){
488             if(jawab[i][m] == soal[n][l] && (n!= soal.size()-1 || count == jawab[i].length()-1)){
489                 huruf +=1;
490                 indexi.push_back(n);
491                 indexj.push_back(l);
492                 ans.push_back(soal[n][l]);
493                 n = soal.size();
494                 count++;
495                 if(count == jawab[i].length()){
496                     for(int x=0;x<ans.size();x++){
497                         // cout << ans[x];
498                     }
499                     indicesi.push_back(indexi);
500                     indicesj.push_back(indexj);
501                     count = 0;
502                     n = soal.size();
503                     m = jawab[i].length();
504                     l = soal[0].length();
505                     k = soal.size();

```

```

506         // cout << "\n";
507     }
508 }else if(n == soal.size()-1 && count != jawab[i].length()-1){
509     n = soal.size();
510     m = jawab[i].length();
511 }
512 }
513 }
514 }
515 else if(jawab[i][j+1] == soal[k+1][l+1] && jawab[i][j+2] == soal[k+2][l+2]){
516     huruf +=1;
517     for(int m=0;m<jawab[i].length();m++){
518         for(int n=k;n<soal.size();n++){ // loop bawah soal
519             n += count;
520             for(int o=1;o<soal[0].length();o++){
521                 o += count; // loop kanan soal
522                 if(jawab[i][m] == soal[n][o] && (n!= soal.size()-1 || count == jawab[i].length()-1)){
523                     huruf +=1;
524                     indexi.push_back(n);
525                     indexj.push_back(o);
526                     ans.push_back(soal[n][o]);
527                     o = soal[0].length();
528                     n = soal.size();
529                     count++;
530                     if(count == jawab[i].length()){
531                         for(int x=0;x<ans.size();x++){
532                             // cout << ans[x];
533                         }
534                     }
535                     indicesi.push_back(indexi);
536                     indicesj.push_back(indexj);
537                     count = 0;
538                     o = soal[0].length();
539                     n = soal.size();
540                     m = jawab[i].length();
541                     l = soal[0].length();
542                     k = soal.size();
543                     // cout << "\n";
544                 }

```

```

545         else if(n == soal.size()-1 && count != jawab[i].length()-1){
546             n = soal.size();
547             o = soal[0].length();
548             m = jawab[i].length();
549         }
550     }
551     else{
552         o = soal[0].length();
553         n = soal.size();
554         m = jawab[i].length();
555     }
556 }
557 }
558 }
559 else if(jawab[i][j+1] == soal[k+1][l-1] && jawab[i][j+2] == soal[k+2][l-2]){
560     huruf +=1;
561     for(int m=0;m<jawab[i].length();m++){
562         for(int n=k+count;n<soal.size();n += count){
563             for(int o=1;o>=0;o--){
564                 o -= count;
565                 if(jawab[i][m] == soal[n][o] && (n!= soal.size()-1 || count == jawab[i].length()-1)){
566                     huruf +=1;
567                     indexi.push_back(n);
568                     indexj.push_back(o);
569                     ans.push_back(soal[n][o]);
570                     o = 0;
571                     n = soal.size();
572                     count ++;
573                     if(count == jawab[i].length()){
574                         for(int x=0;x<ans.size();x++){
575                             // cout << ans[x];
576                         }
577                         indicesi.push_back(indexi);
578                         indicesj.push_back(indexj);
579                         count = 0;
580                         o = 0;
581                         n = soal.size();
582                         m = jawab[i].length();
583                         l = soal[0].length();

```

```

584         k = soal.size();
585         // cout << "\n";
586     }
587 }
588 else if(n == soal.size()-1 && count != jawab[i].length()-1){
589     n = soal.size();
590     o = 0;
591     m = jawab[i].length();
592 }else{
593     o = 0;
594     n = soal.size();
595     m = jawab[i].length();
596 }
597 }
598 }
599 }
600 }
601 }
602 }
603 else{
604     huruf +=1;
605 }
606 }
607 }
608 }
609 }
610 vector<vector<int>> nums (soal.size(), vector<int>(n));
611
612 for(int i=0;i<soal.size();i++){
613     for(int j=0;j<soal[0].length();j++){
614         nums[i][j] = 0;
615     }
616 }
617
618 int change =1;
619 for(int i=0;i<indicesi.size();i++){
620     for(int j=0;j<indicesi[i].size();j++){
621         nums[indicesi[i][j]][indicesj[i][j]] = change;
622     }

```

```

621     nums[indices1[i][j]][indices1[i][j]] = change;
622 }
623 change = (change+1)%6;
624 }
625
626 for(int i=0;i<soal.size();i++){ // soal dibawah
627     for(int j=0;j<soal[0].length();j++){ // soal kesamping
628         if(nums[i][j] == 0){
629             cout << "\033[1;31m" << soal[i][j] << "\033[0m" << " ";
630         }
631         else if(nums[i][j] == 1){
632             cout << "\033[1;32m" << soal[i][j] << "\033[0m" << " ";
633         }
634         else if(nums[i][j] == 2){
635             cout << "\033[1;33m" << soal[i][j] << "\033[0m" << " ";
636         }
637         else if(nums[i][j] == 3){
638             cout << "\033[1;34m" << soal[i][j] << "\033[0m" << " ";
639         }
640         else if(nums[i][j] == 4){
641             cout << "\033[1;35m" << soal[i][j] << "\033[0m" << " ";
642         }
643         else if(nums[i][j] == 5){
644             cout << "\033[1;36m" << soal[i][j] << "\033[0m" << " ";
645         }else{
646             cout << soal[i][j] << " ";
647         }
648     }
649     cout << endl;
650 }
651
652 auto stop = high_resolution_clock::now();
653 auto duration = duration_cast<microseconds>(stop - start);
654 cout << "waktu yang dibutuhkan: " << duration.count() << " microseconds" << endl;
655 cout << "jumlah huruf yang dibandingkan: " << huruf << endl;
656
657 return 0;
658

```

You, 8 hours ago • code beres

### 3. SCREENSHOT INPUT DAN OUTPUT

#### 3.1. Data uji yang berukuran small

```
1  E D P I X A R P H U Z P A E
2  I A E O I O I S P D A O E W
3  S P B S T I N K Y P E T E S
4  O L I G H T Y E A R S A G N
5  Y E C E I B R A B T H T C G
6  T O I N U A S A E S H O Y R
7  Y Y B B M N G N N E A H O U
8  O G W W Y D E U E T M E E Z
9  P Z T S O Y S T O I M A Y Z
10 Z O X H X C C Y I Y L D O U
11 Z O C R K J E S S I E A B K
12 U S E T T S T O R Y E I K L
13 B X M E P E E P O B A I E S
14 I S L I N K Y R Y D O O W Y
15
16
17 WOODY
18 BARBIE
19 JESSIE
20 ALIENS
21 HAMM
22 PIXAR
23 REX
24 COWBOY
25 STORY
26 ZURG
27 LIGHTYEAR You, 2 days ago • test case file lain
28 SLINKY
29 BUZZ
30 ANDY
```

```
D:\KULIAH\SEMESTER 4\Strategi Algoritma\Tugas\Tugas Kecil\Tucil 1\Code\Tucil-1-Stima\src>.\Main
Masukkan nama file (spesifik dengan tempatnya): ../test/small/Toy.txt
Masukan banyak baris soal: 14
E D P I X A R P H U Z P A E
I A E O I O I S P D A O E W
S P B S T I N K Y P E T E S
O L I G H T Y E A R S A G N
Y E C E I B R A B T H T C G
T O I N U A S A E S H O Y R
Y Y B B M N G N N E A H O U
O G W W Y D E U E T M E E Z
P Z T S O Y S T O I M A Y Z
Z O X H X C C Y I Y L D O U
Z O C R K J E S S I E A B K
U S E T T S T O R Y E I K L
B X M E P E E P O B A I E S
I S L I N K Y R Y D O O W Y
waktu yang dibutuhkan: 25988 microseconds
jumlah huruf yang dibandingkan: 1825
```

```

1 HCFIYBPEACHCIB
2 CKIBRYRODMBFOO
3 JACQUESFINDING
4 ECORALREEFB SAH
5 UHTANKGANGAHHS
6 NNOECURBAIHANI
7 TANBBFCRNNSREF
8 SCAUANEMOLSKIN
9 I IHBLOATOINSEW
10 TLSBBARRACUDAO
11 NEHLBIMARLINNL
12 EPFEHUADEMUHCC
13 DOUSEEAELLENTU
14 GURGLEDDDEBMBAJ
15
16
17 BLOAT
18 CLOWNFISH
19 CORALREEF
20 DENTIST
21 BARRACUDA
22 NEMO
23 PELICAN
24 PEACH
25 FINDING
26 BRUCE
27 MARLIN
28 SHARKS
29 GURGLE You, 20 hours ago • ting
30 ELLEN
31 DORY
32 CHUM
33 JACQUES
34 BUBBLES

```

```

D:\KULIAH\SEMESTER 4\Strategi Algoritma\Tugas\Tugas Kecil\Tucil 1\Code\Tucil-1-Stima\src>.\Main
Masukkan nama file (spesifik dengan tempatnya): ../test/small/Nemo.txt
Masukkan banyak baris soal: 14
HCFIYBPEACHCIB
CKIBRYRODMBFOO
JACQUESFINDING
ECORALREEFB SAH
UHTANKGANGAHHS
NNOECURBAIHANI
TANBBFCRNNSREF
SCAUANEMOLSKIN
I IHBLOATOINSEW
TLSBBARRACUDAO
NEHLBIMARLINNL
EPFEHUADEMUHCC
DOUSEEAELLENTU
GURGLEDDDEBMBAJ
waktu yang dibutuhkan: 30240 microseconds
jumlah huruf yang dibandingkan: 2092

```

```

1  M O N S T R O P O L I S O S
2  S R S D P L A N I O R L O A
3  L C D E Y E E N O S S I B S
4  R O Z Y K R D D I Y C D M R
5  S R O B D E R K I E I A R A
6  H C O L M O S L R M E O S N
7  W I I S I W M O O R O H S D
8  R H A W O C O C C L G R O A
9  C O C Z Y D E S F U O R N L
10 I D A N E L G E A S S M M L
11 Y W E W I G R L D I S N E Y
12 I S K A L A S U L L E Y R S
13 I W I O C M Y G P I X A R D
14 O M M S A O S R E T S N O M
15
16
17  B O O
18  D I S N E Y
19  W A Z O W S K I
20  S C A R E F L O O R
21  C H I L D R E N
22  M O N S T R O P O L I S
23  M O N S T E R S
24  S U L L E Y
25  S C R E A M S
26  C E L I A
27  O N E E Y E D
28  D O O R
29  R A N D A L L
30  M I K E
31  R O Z
32  P I X A R
33  L A U G H S

```

```

D:\KULIAH\SEMESTER 4\Strategi Algoritma\Tugas\Tugas Kecil\Tucil 1\Code\Tucil-1-Stima\src>.\Main
Masukkan nama file (spesifik dengan tempatnya): ../test/small/Monster.txt
Masukkan banyak baris soal: 14
M O N S T R O P O L I S O S
S R S D P L A N I O R L O A
L C D E Y E E N O S S I B S
R O Z Y K R D D I Y C D M R
S R O B D E R K I E I A R A
H C O L M O S L R M E O S N
W I I S I W M O O R O H S D
R H A W O C O C C L G R O A
C O C Z Y D E S F U O R N L
I D A N E L G E A S S M M L
Y W E W I G R L D I S N E Y
I S K A L A S U L L E Y R S
I W I O C M Y G P I X A R D
O M M S A O S R E T S N O M
waktu yang dibutuhkan: 30537 microseconds
jumlah huruf yang dibandingkan: 2276

```

### 3.2. Data uji yang berukuran medium

```

1  A S R R F S B G C C O Y A A A E W H Q A H D
2  Q K D O A P K I B M K M Q L K X R G B V E G
3  G M H M E R I P M E B G A V V G Q I U S R M
4  O M C E S D B J S R Z G C U B C A N Y A X O
5  L N I P S I R C O Z G N X M N C P L N V E W
6  D I N O E A N S L N O M O D B Z A N H M N S
7  E D F T R N I K M C C J P S F B Y A A U Q E
8  N A S B P A U W R I A W A W C S P C C J Y S
9  D R U C C B Q T N E E M L Q M F G W O J A O
10 E E O R P W R T R J N U A I K G O G R K Y D
11 L D I Q S X O E V O I Y T N P F H G T I M T
12 I F C C V S O G Q A F H V C O J O K L B O R
13 C V I P H I J U F R W O B K X J N O A R A T
14 I L L L T Z Y V E L O C K A A W E A N W D W
15 O M E I V V F T U P I N K L A D Y L D X W Y
16 U X D H I J G C K N N U O C A M C H Y R P V
17 S R D B B R A E B U R N Y E E S R G Y K S B
18 Q Y E Z F J O N A G O L D C G X I F E O R Q
19 A I R N T D E R A L U A P V Q R S M I M T F
20 S R A V I U K I K J C B R D Z O P X G V G Z
21
22
23 CAMEO
24 CORTLAND
25 CRISPIN
26 EMPIRE
27 ENVY
28 FORTUNE
29 FUJI
30 GALA
31 IDARED
32 JONAMAC
33 KIKU
34 MCINTOSH
35 OPAL
36 PINKLADY
37 ROME

```

```

D:\KULIAH\SEMESTER 4\Strategi Algoritma\Tugas\Tugas Kecil\Tucil 1\Code\Tucil-1-Stima\src>.Main
Masukkan nama file (spesifik dengan tempatnya): ../test/medium/Apple.txt
Masukan banyak baris soal: 20
A S R R F S B G C C O Y A A A E W H Q A H D
Q K D O A P K I B M K M Q L K X R G B V E G
G M H M E R I P M E B G A V V G Q I U S R M
O M C E S D B J S R Z G C U B C A N Y A X O
L N I P S I R C O Z G N X M N C P L N V E W
D I N O E A N S L N O M O D B Z A N H M N S
E D F T R N I K M C C J P S F B Y A A U Q E
N A S B P A U W R I A W A W C S P C C J Y S
D R U C C B Q T N E E M L Q M F G W O J A O
E E O R P W R T R J N U A I K G O G R K Y D
L D I Q S X O E V O I Y T N P F H G T I M T
I F C C V S O G Q A F H V C O J O K L B O R
C V I P H I J U F R W O B K X J N O A R A T
I L L L T Z Y V E L O C K A A W E A N W D W
O M E I V V F T U P I N K L A D Y L D X W Y
U X D H I J G C K N N U O C A M C H Y R P V
S R D B B R A E B U R N Y E E S R G Y K S B
Q Y E Z F J O N A G O L D C G X I F E O R Q
A I R N T D E R A L U A P V Q R S M I M T F
S R A V I U K I K J C B R D Z O P X G V G Z
waktu yang dibutuhkan: 46703 microseconds
jumlah huruf yang dibandingkan: 2877

```

```

1 K S J K X I K P P A L A R M C L O C K I B F
2 A O R N H E A J M A W L U W A A Y G C K W Y
3 Y N P E T X S J A W Y N S Z Q V F B I D N O
4 N H R P P J A Y L Z R X N U T W N D X M D Z
5 C Y I O E P C V P Y S J Y M Z F S I V F K T
6 M O A U B Z I N W O G G N I S S E R D V D E
7 D J M C M E N L O C N P R P T M G O F R A S
8 X H R F A K B R S H I X E P X J P N E P Y O
9 K L I M O U B Y O L O N M Q K R A S Q P A L
10 N V Y K X R Y Y L R A S O C L H S B J G M C
11 T A R B A Q T O J F R O T S E E O O E S Y R
12 Y S Y H D S W E C E Z I E R R P N T I D M Z
13 P N Z O U S W B R W I N M F J V O F O D A R
14 D I K T V S V O L E H L Y A S G X Q L H A O
15 O A W E E T E L E V I S I O N Z G L D E P R
16 O T U T T V D U O M S W I N D O W S D R H T
17 R R R E R V K E K K L K S Q J T K O U S Z S
18 W U J T E D D Y B E A R E E S Y A G P Y T R
19 N C N L G V U P I N S A D Y S L Y Q Z Q Z P
20 V S R H Z A L Q T H G I L O N Y N V A H I P
21
22
23 BED
24 CLOSET
25 DOOR
26 DUVET
27 FAN
28 LAMP      You, 21 hours ago • tinggal warnain
29 LIGHT
30 MIRROR
31 PHOTO
32 PILLOWS
33 RADIO
34 REMOTE
35 ROBE
36 RUG
37 SHELF

```

```

D:\KULIAH\SEMESTER 4\Strategi Algoritma\Tugas\Tugas Kecil\Tucil 1\Code\Tucil-1-Stima\src>.Main
Masukkan nama file (spesifik dengan tempatnya): ../test/medium/Bedroom.txt
Masukan banyak baris soal: 20
K S J K X I K P P A L A R M C L O C K I B F
A O R N H E A J M A W L U W A A Y G C K W Y
Y N P E T X S J A W Y N S Z Q V F B I D N O
N H R P P J A Y L Z R X N U T W N D X M D Z
C Y I O E P C V P Y S J Y M Z F S I V F K T
M O A U B Z I N W O G G N I S S E R D V D E
D J M C M E N L O C N P R P T M G O F R A S
X H R F A K B R S H I X E P X J P N E P Y O
K L I M O U B Y O L O N M Q K R A S Q P A L
N V Y K X R Y Y L R A S O C L H S B J G M C
T A R B A Q T O J F R O T S E E O O E S Y R
Y S Y H D S W E C E Z I E R R P N T I D M Z
P N Z O U S W B R W I N M F J V O F O D A R
D I K T V S V O L E H L Y A S G X Q L H A O
O A W E E T E L E V I S I O N Z G L D E P R
O T U T T V D U O M S W I N D O W S D R H T
R R R E R V K E K K L K S Q J T K O U S Z S
W U J T E D D Y B E A R E E S Y A G P Y T R
N C N L G V U P I N S A D Y S L Y Q Z Q Z P
V S R H Z A L Q T H G I L O N Y N V A H I P
waktu yang dibutuhkan: 45198 microseconds
jumlah huruf yang dibandingkan: 3985

```



```

1  VHSTRIPESORQJQZSXZRAPV
2  ITNLANOOMXEIHLAMMAMSJI
3  OZXFGHAWDXTGWOGYLTAELS
4  IREEELEIXZNVELGNUMJSEPY
5  CKNWSCHGRRUICZNQOESOHW
6  AZIBUWEMEETHQLRQVNWQGZY
7  RALBMWWRTOBCAOGINAISAQ
8  NZEGARVZKMOIWSHMALAYAN
9  IUFVTOOWANDDSCCCZJTND
10 VSWNROGTSUJGOURDTHEOJD
11 OSDAAZVEAUEDGQDOINXAVT
12 RPNINCRSUDNISTJZDQAFMD
13 EGINVVNERIEJBCBAPOERUN
14 ERETAETAEMCRBSNFWZXIAC
15 TFBTLAGNEBXVPGTMIICQWH
16 QNIOIICKNDLIWEEEDDKBAVG
17 DOLIATATURZRETAENAMNVV
18 NCYUJBASPWETZIXVAQAPAC
19 JVBWFBI LGDHBKHXQTXVNMP
20 KFFTS GNIRAORJEZIPJFMDH
21
22
23 AFRICAN
24 ASIAN
25 BENGAL
26 CLAWS
27 FELINE
28 HUNTER
29 JUNGLE
30 ORANGE
31 PREDATOR
32 ROARING      You, 21 hours ago • tinggal wart
33 SIBERIAN
34 STRIPES
35 TAIL
36 TEETH
37 WILD

```

```

D:\KULIAH\SEMESTER 4\Strategi Algoritma\Tugas\Tugas Kecil\Tucil 1\Code\Tucil-1-Stima\src>.\Main
Masukkan nama file (spesifik dengan tempatnya): ../test/medium/Tiger.txt
Masukkan banyak baris soal: 20
VHSTRIPESORQJQZSXZRAPV
ITNLANOOMXEIHLAMMAMSJI
OZXFGHAWDXTGWOGYLTAELS
IREEELEIXZNVELGNUMJSEPY
CKNWSCHGRRUICZNQOESOHW
AZIBUWEMEETHQLRQVNWQGZY
RALBMWWRTOB CAOGINAISAQ
NZEGARVZKMOIWSHMALAYAN
IUFVTOOWANDDSCCCZJTND
VSWNROGTSUJGOURDTHEOJD
OSDAAZVEAUEDGQDOINXAVT
RPNINCRSUDNISTJZDQAFMD
EGINVVNERIEJBCBAPOERUN
ERETAETAEMCRBSNFWZXIAC
TFBTLAGNEBXVPGTMIICQWH
QNIOIICKNDLIWEEEDDKBAVG
DOLIATATURZRETAENAMNVV
NCYUJBASPWETZIXVAQAPAC
JVBWFBI LGDHBKHXQTXVNMP
KFFTS GNIRAORJEZIPJFMDH
waktu yang dibutuhkan: 47549 microseconds
jumlah huruf yang dibandingkan: 3587

```

### 3.3. Data uji yang berukuran large

```

1  ETOWUVHFM CZGSOEELBTJGBEAEMILIFGG
2  GLVTTEPDHWNZLCZGZGDULKYTBZEKJFUT
3  NZBDXMMWKJMQKMWQKRWL AHZRT EFJWMNAG
4  AGGUVBCISXMLZCZAPJCTVHERHXDGPVVM
5  ROEGRKNWAMMYEJPESKNPLIZTYEZUNUNAT
6  OZEVNPIJNMMUAEEZBUDMJUIWPVYVIMWE
7  BIWIPHYPCGSTSYREKAJYQACTJLK YFSFV
8  BACETBIQDSXOXRRQYWIAAYZQMUMRBANO
9  AWNKIOZHMXXCCRFA XQSFNWJAZOIOOVPU
10 XJKANXMANTZ IYHPJBKGDZROBQXETUANA
11 HDJBNGLKO OYRIARFHVINROI IZZFEVRJS
12 CGWZLAJTJRHP PPJGXJBZWYRJAHEWTG I K
13 QQCJKEQVFMSAKYIUCSSHDPJAMVLJW GKR
14 XFTOJDCYVDVBYZ ZNVANFSJBUJNOIEZVF
15 WDGUBYFSYLHAPZMREAAJIEGPARJUXFRC
16 KGSTSCQKLZFZFP IQKALRXIWEIOSESPWF
17 QROWKUGWEOPRZA OYUQPIYSJTVJMFKKRT
18 PELHFGGSZHTZOCQZMUKPKOPEHRHSXQJL
19 WDUQZRSDDPTUVXOHJIPJLDBMAMPUNPIX
20 UTJFLNHAPPLENISKJSLLENQVZJAKCZG
21 BJORAXDZPCKGT OQJCJTGFHRIOJUUVZUWO
22 OJOIVHSRWPTRB OCHONEYDEWSCRCYGYBY
23 ZGRAJBAUXWZVGIWOC SJZKOKTAYRREHCC
24 NUNYEULFCYADF BUTCWIWSUINDHSLCXLJ
25 DLFVAVCOXVUTPPMYIELSALQUOEROBGGJJ
26 UKOAMXAGWSNEEFWWEPEARWPYTRNQCXN
27 GOGMBLBOTPSIBRCGMW MKCICBDHQIYGC L
28 JKLLZJLPHOFKGLPMOC PITXZWHTGSMHKPD
29 SULBKQ QPCMDZMMNERXAHTY YWEABRSY GJ
30 ZWHIYYYOQWBKINSTLJEEETQLRXDMEVMH
31 VNBGTWYKVGUJZXTKXONDRHIEAIWIIAGZ
32 VQKUQLJOAYIPJDXAMONZRFJJIKPGHMHA
33
34
35 APPLE
36 BANANA
37 COCONUT
38 GUAVA
39 LEMON
40 ORANGE
41 PINEAPPLE
42 APRICOT
43 BLACKBERRY
44 DURIAN
45 HONEYDEW
46 LIME
47 PAPAYA
48 WATERMELON
49 AVOCADO
50 CHERRY
51 GRAPES
52 KIWI
53 MANGO
54 PEAR

```

```

D:\KULIAH\SEMESTER 4\Strategi Algoritma\Tugas\Tugas Kecil\Tucil 1\Code\Tucil-1-Stima\src>.Main
Masukkan nama file (spesifik dengan tempatnya): ../test/large/Buah.txt
Masukan banyak baris soal: 32
ETOWUVHFM CZGSOEELBTJGBEAEMILIFGG
GLVTTEPDHWNZLCZGZGDULKYTBZEKJFUT
NZBDXMMWKJMQKMWQKRWL AHZRT EFJWMNAG
AGGUVBCISXMLZCZAPJCTVHERHXDGPVVM
ROEGRKNWAMMYEJPESKNPLIZTYEZUNUNAT
OZEVNPIJNMMUAEEZBUDMJUIWPVYVIMWE
BIWIPHYPCGSTSYREKAJYQACTJLK YFSFV
BACETBIQDSXOXRRQYWIAAYZQMUMRBANO
AWNKIOZHMXXCCRFA XQSFNWJAZOIOOVPU
XJKANXMANTZ IYHPJBKGDZROBQXETUANA
HDJBNGLKO OYRIARFHVINROI IZZFEVRJS
CGWZLAJTJRHP PPJGXJBZWYRJAHEWTG I K
QQCJKEQVFMSAKYIUCSSHDPJAMVLJW GKR
XFTOJDCYVDVBYZ ZNVANFSJBUJNOIEZVF
WDGUBYFSYLHAPZMREAAJIEGPARJUXFRC
KGSTSCQKLZFZFP IQKALRXIWEIOSESPWF
QROWKUGWEOPRZA OYUQPIYSJTVJMFKKRT
PELHFGGSZHTZOCQZMUKPKOPEHRHSXQJL
WDUQZRSDDPTUVXOHJIPJLDBMAMPUNPIX
UTJFLNHAPPLENISKJSLLENQVZJAKCZG
BJORAXDZPCKGT OQJCJTGFHRIOJUUVZUWO
OJOIVHSRWPTRB OCHONEYDEWSCRCYGYBY
ZGRAJBAUXWZVGIWOC SJZKOKTAYRREHCC
NUNYEULFCYADF BUTCWIWSUINDHSLCXLJ
DLFVAVCOXVUTPPMYIELSALQUOEROBGGJJ
UKOAMXAGWSNEEFWWEPEARWPYTRNQCXN
GOGMBLBOTPSIBRCGMW MKCICBDHQIYGC L
JKLLZJLPHOFKGLPMOC PITXZWHTGSMHKPD
SULBKQ QPCMDZMMNERXAHTY YWEABRSY GJ
ZWHIYYYOQWBKINSTLJEEETQLRXDMEVMH
VNBGTWYKVGUJZXTKXONDRHIEAIWIIAGZ
VQKUQLJOAYIPJDXAMONZRFJJIKPGHMHA
waktu yang dibutuhkan: 96856 microseconds
jumlah huruf yang dibandingkan: 9369

```

```
1 FDEREFFUSY TOMFSL LUNCHTIMEUPBEAAUSZ
2 ATWIJNJHZEBDNZEVUKLORQQCXYOYVHKUWX
3 IODG SOMBERJSHH ZLP RJPWPAZPYOLLRBPFL
4 QHQKPFIA CLMTGIIKOGKYJRIJRRUMMOVRYO
5 FEWHPIEUNVBCPB SOIHNIPWIVOSHIPGHOKL
6 AXFEASMLFIXEEPEGPJ OINCHYZOHTKNZHV L
7 FNDTSOBI DKSOEMHJ KZZCNGWMPUIIBIWSFI
8 VTTJSMQWCNQKLKTDJOGVLNCTM MTGNLEKOP
9 XDXPEEMCXRAWEE OXQULHNAAAAKEATUDVTO
10 PPUENTITG SOHRQPEEQDZXSNLMUV TZCEEWP
11 JEYUGRINRAWSNNYMWJFCYEJNPRVETIUETZ
12 DERQEYINDVPXCTHVPYVQLNEAOWUIHDOVWL
13 HAHKRKF SBJVS IORAVROYBWNLU IEMRIQVXQ
14 HAXFRQLSALINCAPZYRYDTPUBFSXARWYVS
15 NRLALPLRNOUFTRQECYLWESUXRATIPIEEPZ
16 VXBNCMOYSTJTTEVEALTRSTINWNJDHVTLMPC
17 FMHZCHEMRTEQNCPTSRDHIPTIZZTNUETIIS
18 EIVWRME OOSYLBSEESPJUVRI PVZSBEZLFNX
19 VLRITNPMTFASIJNISAA MNANAAXIQHPBEJG
20 AAOQEPR IIEEZCRMLBN OUIHGPMRNAAIXSTR
21 JNUGOWNECSEIARB FNWHBNSTSTJDKUTBEHW
22 IOTBDGIQTDEEGNAIEFJOUEJSSFS DIOVAFU
23 IMCTSOVNTIQVGNKPOBIEVUIDEPENDENCED
24 ERATBDSHGQRDGCUBPEZZDUWUITJPTYNWV
25 BOSQUDEOZDOEOYHDVOBXEIBKQ QFSRRBIFR
26 YHTAHDZGYIEQMAPFEPOROKNRORUGMWALUW
27 SHFCHXUGABCEREIRCKSKLZPGEIRSVHDDOR
28 PIZYWPLEZGEZTBNDUCXYOTTXOVEBCXCUXS
29 SNFKWNTWTENAYYRTTUMEBBUFM CYRFNQAST
30 TPBGLLFKPNKENPXVSLZBKXSWDZEIDVVMIB
31 NVKTPMNXTFHGNGIOUPGF EKWBTOQR CUFZOR
32 BLNCEQOHWEIOYULGCONTROLDETSISEDREQ
33
34
35 ALCOHOL
36 ATTESTING You, 21 hours ago • tinggal warnain doang
37 AVOIDS
38 BOASTER
39 CAPSIZED
40 CARP
41 CHEMISE
42 CONTROL
43 DEPENDENCE
44 DESISTED
45 DIET
46 EARNESTLY
47 EMBARKING
48 EXPENDABLE
49 FEIGNED
50 HANDLE
51 HARPIST
52 HORMONAL
53 HUMANELY
54 HYPOTHESIZE
55 ISOMETRY
56 LOLLITOP
57 LUNCHTIME
58 LURKING
```

```
D:\KULIAH\SEMESTER 4\Strategi Algoritma\Tugas\Tugas Kecil\Tucil 1\Code\Tucil-1-Stima\src>.\Main
Masukkan nama file (spesifik dengan tempatnya): ../test/large/Random.txt
Masukan banyak baris soal: 32
FDEREFFUSY TOMFSL LUNCHTIMEUPBEAAUSZ
ATWIJNJHZEBDNZEVUKLORQQCXYOYVHKUWX
IODG SOMBERJSHH ZLP RJPWPAZPYOLLRBPFL
QHQKPFIA CLMTGIIKOGKYJRIJRRUMMOVRYO
FEWHPIEUNVBCPB SOIHNIPWIVOSHIPGHOKL
AXFEASMLFIXEEPEGPJ OINCHYZOHTKNZHV L
FNDTSOBI DKSOEMHJ KZZCNGWMPUIIBIWSFI
VTTJSMQWCNQKLKTDJOGVLNCTM MTGNLEKOP
XDXPEEMCXRAWEE OXQULHNAAAAKEATUDVTO
PPUENTITG SOHRQPEEQDZXSNLMUV TZCEEWP
JEYUGRINRAWSNNYMWJFCYEJNPRVETIUETZ
DERQEYINDVPXCTHVPYVQLNEAOWUIHDOVWL
HAHKRKF SBJVS IORAVROYBWNLU IEMRIQVXQ
HAXFRQLSALINCAPZYRYDTPUBFSXARWYVS
NRLALPLRNOUFTRQECYLWESUXRATIPIEEPZ
VXBNCMOYSTJTTEVEALTRSTINWNJDHVTLMPC
FMHZCHEMRTEQNCPTSRDHIPTIZZTNUETIIS
EIVWRME OOSYLBSEESPJUVRI PVZSBEZLFNX
VLRITNPMTFASIJNISAA MNANAAXIQHPBEJG
AAOQEPR IIEEZCRMLBN OUIHGPMRNAAIXSTR
JNUGOWNECSEIARB FNWHBNSTSTJDKUTBEHW
IOTBDGIQTDEEGNAIEFJOUEJSSFS DIOVAFU
IMCTSOVNTIQVGNKPOBIEVUIDEPENDENCED
ERATBDSHGQRDGCUBPEZZDUWUITJPTYNWV
BOSQUDEOZDOEOYHDVOBXEIBKQ QFSRRBIFR
YHTAHDZGYIEQMAPFEPOROKNRORUGMWALUW
SHFCHXUGABCEREIRCKSKLZPGEIRSVHDDOR
PIZYWPLEZGEZTBNDUCXYOTTXOVEBCXCUXS
SNFKWNTWTENAYYRTTUMEBBUFM CYRFNQAST
TPBGLLFKPNKENPXVSLZBKXSWDZEIDVVMIB
NVKTPMNXTFHGNGIOUPGF EKWBTOQR CUFZOR
BLNCEQOHWEIOYULGCONTROLDETSISEDREQ
waktu yang dibutuhkan: 110026 microseconds
jumlah huruf yang dibandingkan: 12675
```

```
1 REBCSHNOOSSABXKLGVXAQQZBYETXMFMX
2 QGOAWIAPDJMDSAQRLEANIYQUSXXDAXCY
3 UXGDNEQRSYOSYYGJOMPGLFGHWHHEWNFEF
4 KSHCWJPRMMYUWXWLZHKKFZEDNPKODTTW
5 LMQVVVOMWOASDJLNNLLOLTHTNSEMBOWVS
6 IKBMIIRDTPNNQREUHAIOUUBEAOGZRLKGN
7 RNMOTDRMIQZICZCDJWONDRDCUJIBILRU
8 HHLTNIEYQJZVCIXCZCAGBLKHNVALNUMM
9 XIDKAHAXQWZMZAHOXZXTUGFSJJLCPBWD
10 NWRNEXXSEMKNKOZIXXYURBJTSLAEWVQWD
11 GUGSHLFUQUBBNTWGGGTZQYAQDTHDDZZGZ
12 NLIDORWCJDVSPYOLJMMWFUVNURWSSGVU
13 EJUNNVCSXJRHTPSXDDUMAGMLLVUIMHWM
14 SMAYZGVBMKIWLMTBJJDBDFZXCCMLSOU
15 PIGKRDWCALGHQUNJVVJTMVQSUVNFIQAZ
16 PFRSQRJUSAGNKRSDAWEYXZWOJEOWHSPH
17 SXAQYETZERPFJTBJIMTLXFBAlFZTHLRY
18 EFTMYLNPNGYSIEJXTLLIEDSKDFDLALAX
19 YAISBEGBUJAVBWZJXQVXGLGEIPNCWEHN
20 YNULCFGKAJMLMGBHJSJQXZFUNBYZFMUBN
21 FBGTGLWOJIBWFEIJKZPPMJPKSHXENENG
22 CLARINETZXPXEIJUTARLBASSUACCORDI
23 QQUUUCDTJBXSUVVXBTIRENHVWQSLWHIYV
24 REBNDDDKLCUTLCQYNZGGS GCPELZHJJNV
25 MKESLPYCMRSCVLDHCNENOHPOXASDGURR
26 PRVSRRTZNSLJCECAMJYVVSIALNGIHOWDQ
27 BMDVCRNKWVOEUIBZSXVFBYDAHLLGXVO
28 ONMLSSWWHSHSGTICCDNDGFFJNOUPDCFRW
29 CAPZSFHCDFGVJUDWBITOCZQSELWHPOMS
30 UJJNVEPABDAOQDASIHNEOXAIIDAKQZBXQ
31 H LAPVJRKGSRMRGWTAYKSZQKTFSUKMNNK
32 FCBIIIEGFPBYROQWTGCSMIJQHUPNMRVLR
33
34
35 BASS You, 21 hours ago • tinggal warnain doang
36 CELLO
37 FLUTE
38 HARP
39 SAXOPHONE
40 UKULELE
41 ANGKLUNG
42 BASSOON
43 CLARINET
44 GUITAR
45 MANDOLIN
46 TRIANGLE
47 VIOLIN
48 BANJO
49 CAJON
50 DRUM
51 HARMONICA
52 PIANO
53 TRUMPET
```

```
D:\KULIAH\SEMESTER 4\Strategi Algoritma\Tugas\Tugas Kecil\Tucil 1\Code\Tucil-1-Stima\src>.Main
Masukkan nama file (spesifik dengan tempatnya): ../test/large/Music.txt
Masukkan banyak baris soal: 32
REBCSHNOOSSABXKLGVXAQQZBYETXMFMX
QGOAWIAPDJMDSAQRLEANIYQUSXXDAXCY
UXGDNEQRSYOSYYGJOMPGLFGHWHHEWNFEF
KSHCWJPRMMYUWXWLZHKKFZEDNPKODTTW
LMQVVVOMWOASDJLNNLLOLTHTNSEMBOWVS
IKBMIIRDTPNNQREUHAIOUUBEAOGZRLKGN
RNMOTDRMIQZICZCDJWONDRDCUJIBILRU
HHLTNIEYQJZVCIXCZCAGBLKHNVALNUMM
XIDKAHAXQWZMZAHOXZXTUGFSJJLCPBWD
NWRNEXXSEMKNKOZIXXYURBJTSLAEWVQWD
GUGSHLFUQUBBNTWGGGTZQYAQDTHDDZZGZ
NLIDORWCJDVSPYOLJMMWFUVNURWSSGVU
EJUNNVCSXJRHTPSXDDUMAGMLLVUIMHWM
SMAYZGVBMKIWLMTBJJDBDFZXCCMLSOU
PIGKRDWCALGHQUNJVVJTMVQSUVNFIQAZ
PFRSQRJUSAGNKRSDAWEYXZWOJEOWHSPH
SXAQYETZERPFJTBJIMTLXFBAlFZTHLRY
EFTMYLNPNGYSIEJXTLLIEDSKDFDLALAX
YAISBEGBUJAVBWZJXQVXGLGEIPNCWEHN
YNULCFGKAJMLMGBHJSJQXZFUNBYZFMUBN
FBGTGLWOJIBWFEIJKZPPMJPKSHXENENG
CLARINETZXPXEIJUTARLBASSUACCORDI
QQUUUCDTJBXSUVVXBTIRENHVWQSLWHIYV
REBNDDDKLCUTLCQYNZGGS GCPELZHJJNV
MKESLPYCMRSCVLDHCNENOHPOXASDGURR
PRVSRRTZNSLJCECAMJYVVSIALNGIHOWDQ
BMDVCRNKWVOEUIBZSXVFBYDAHLLGXVO
ONMLSSWWHSHSGTICCDNDGFFJNOUPDCFRW
CAPZSFHCDFGVJUDWBITOCZQSELWHPOMS
UJJNVEPABDAOQDASIHNEOXAIIDAKQZBXQ
H LAPVJRKGSRMRGWTAYKSZQKTFSUKMNNK
FCBIIIEGFPBYROQWTGCSMIJQHUPNMRVLR
waktu yang dibutuhkan: 96716 microseconds
jumlah huruf yang dibandingkan: 6436
```

#### **4. ALAMAT DRIVE KODE PROGRAM**

<https://github.com/Hambinn/Tucil-1-Stima>

## 5. CEKLIST

Poin	Ya	Tidak
1. Program berhasil dikompilasi tanpa kesalahan (no syntax error)	√	
2. Program berhasil running	√	
3. Program dapat membaca file masukan dan menuliskan luaran.	√	
4. Program berhasil menemukan semua kata di dalam puzzle.	√	