

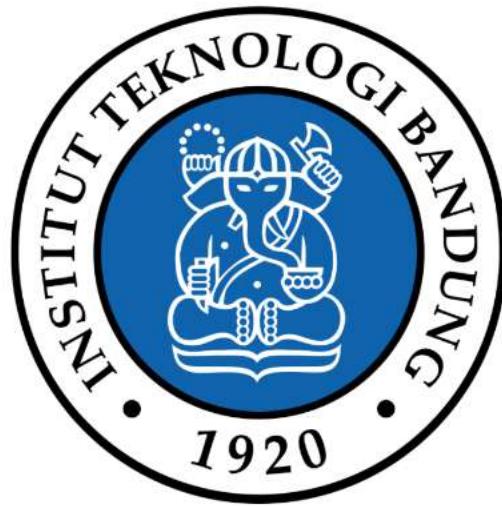
LAPORAN TUGAS KECIL 1
“Penyelesaian Permainan Kartu 24 dengan Algoritma Brute Force”

Laporan Dibuat untuk Memenuhi Tugas Perkuliahan

Mata Kuliah Strategi Algoritma (IF2211)

KELAS 01

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ALGORITMA BRUTE FORCE

Algoritma brute force didefinisikan sebagai pendekatan yang lempang (straightforward) untuk memecahkan suatu persoalan. Algoritma brute force ini biasanya didasarkan pada pernyataan pada persoalan atau definisi/konsep yang dilibatkan. Karakteristik Algoritma Brute Force umumnya algoritma ini tidak “cerdas” dan tidak mangkus, karena ia membutuhkan volume komputasi yang besar dan waktu yang lama dalam penyelesaiannya. Kata “force” mengindikasikan “tenaga” ketimbang “otak” Kadang-kadang algoritma brute force disebut juga algoritma naif (naïve algorithm). Algoritma brute force lebih cocok untuk persoalan yang ukuran masukannya (n) kecil. Pertimbangannya karena sederhana dan implementasinya mudah. Algoritma brute force sering digunakan sebagai basis pembanding dengan algoritma lain yang lebih mangkus. Meskipun bukan metode problem solving yang mangkus, hampir semua persoalan dapat diselesaikan dengan algoritma brute force. Ini adalah kelebihan brute force yaitu sukar menunjukkan persoalan yang tidak dapat diselesaikan dengan metode brute force. Bahkan, ada persoalan yang hanya dapat diselesaikan dengan brute force.

Kekuatan Algoritma Brute Force :

1. Algoritma brute force dapat diterapkan untuk memecahkan hampir sebagian besar masalah (wide applicability).
2. Algoritma brute force sederhana dan mudah dimengerti.
3. Algoritma brute force menghasilkan algoritma yang layak untuk beberapa masalah penting seperti pencarian, pengurutan, pencocokan string, perkalian matriks.
4. Algoritma brute force menghasilkan algoritma baku (standard) untuk tugas-tugas komputasi seperti penjumlahan/perkalian n buah bilangan, menentukan elemen minimum atau maksimum di dalam senarai (larik).

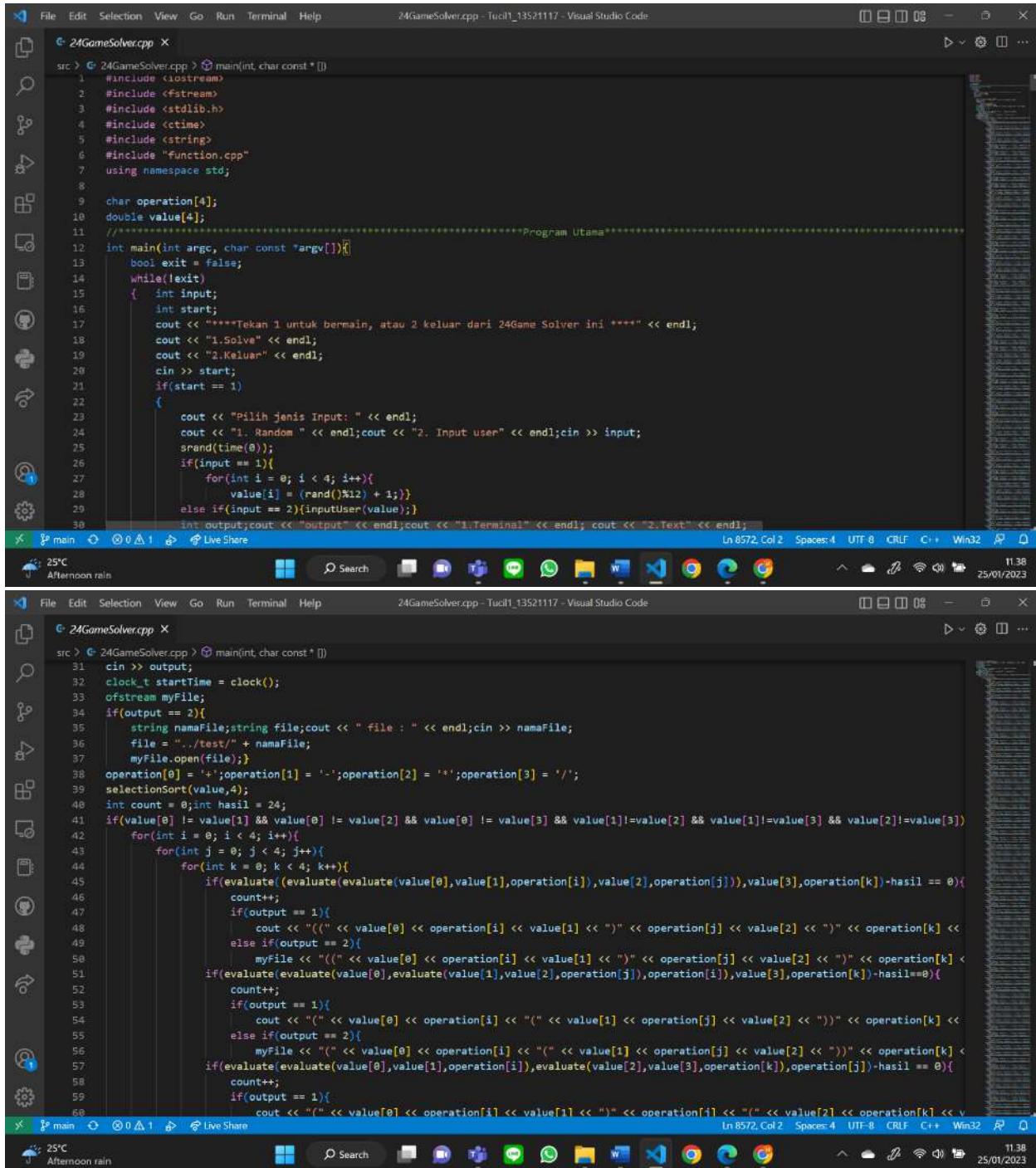
Kelemahan Algoritma Brute Force :

1. Algoritma brute force jarang menghasilkan algoritma yang mangkus.
2. Algoritma brute force umumnya lambat untuk masukan berukuran besar sehingga tidak dapat diterima.
3. Tidak sekonstruktif/sekratif strategi pemecahan masalah lainnya.

Aplikasi dari algoritma brute force salah satunya adalah pada Penyelesaian Permainan Kartu 24. Pertama, program akan meminta 4 buah input kepada pengguna. Pengguna hanya bisa memasukkan 4 input, namun pengguna dapat memilih apakah akan memasukkan input secara random atau input manual. Jika memilih secara random, maka akan diacak 4 angka yang hasilnya akan ditampilkan ke pengguna. Jika memilih input manual, maka pengguna akan diminta untuk mengisi 4 angka. Dalam menginputkan suatu nilai pengguna hanya bisa menginputkan As, 2, 3, 4, 5, 6, 7, 8, 9, 10, J, Q, K. Jika input nya salah maka akan dikeluarkan pesan error.

Source Program

24GameSolver.cpp



```

24GameSolver.cpp - Tucil1_13521117 - Visual Studio Code
File Edit Selection View Go Run Terminal Help
src > 24GameSolver.cpp > main(int, char const *[])
1 #include <iostream>
2 #include <fstream>
3 #include <stdlib.h>
4 #include <ctime>
5 #include <string>
6 #include "function.cpp"
7 using namespace std;
8
9 char operation[4];
10 double value[4];
11 //*****Program Utama*****
12 int main(int argc, char const *argv[]){
13     bool exit = false;
14     while(!exit)
15     {
16         int input;
17         cout << "****Tekan 1 untuk bermain, atau 2 keluar dari 24Game Solver ini ****" << endl;
18         cout << "1.Solve" << endl;
19         cout << "2.Keluar" << endl;
20         cin >> start;
21         if(start == 1)
22         {
23             cout << "Pilih jenis Input: " << endl;
24             cout << "1. Random " << endl;cout << "2. Input user" << endl;cin >> input;
25             srand(time(0));
26             if(input == 1){
27                 for(int i = 0; i < 4; i++){
28                     value[i] = (rand()%12) + 1;
29                 }
30             else if(input == 2)(inputUser(value));
31             int output;cout << "output" << endl;cout << "1.Terminal" << endl; cout << "2.Text" << endl;
32         }
33     }
34 }

```

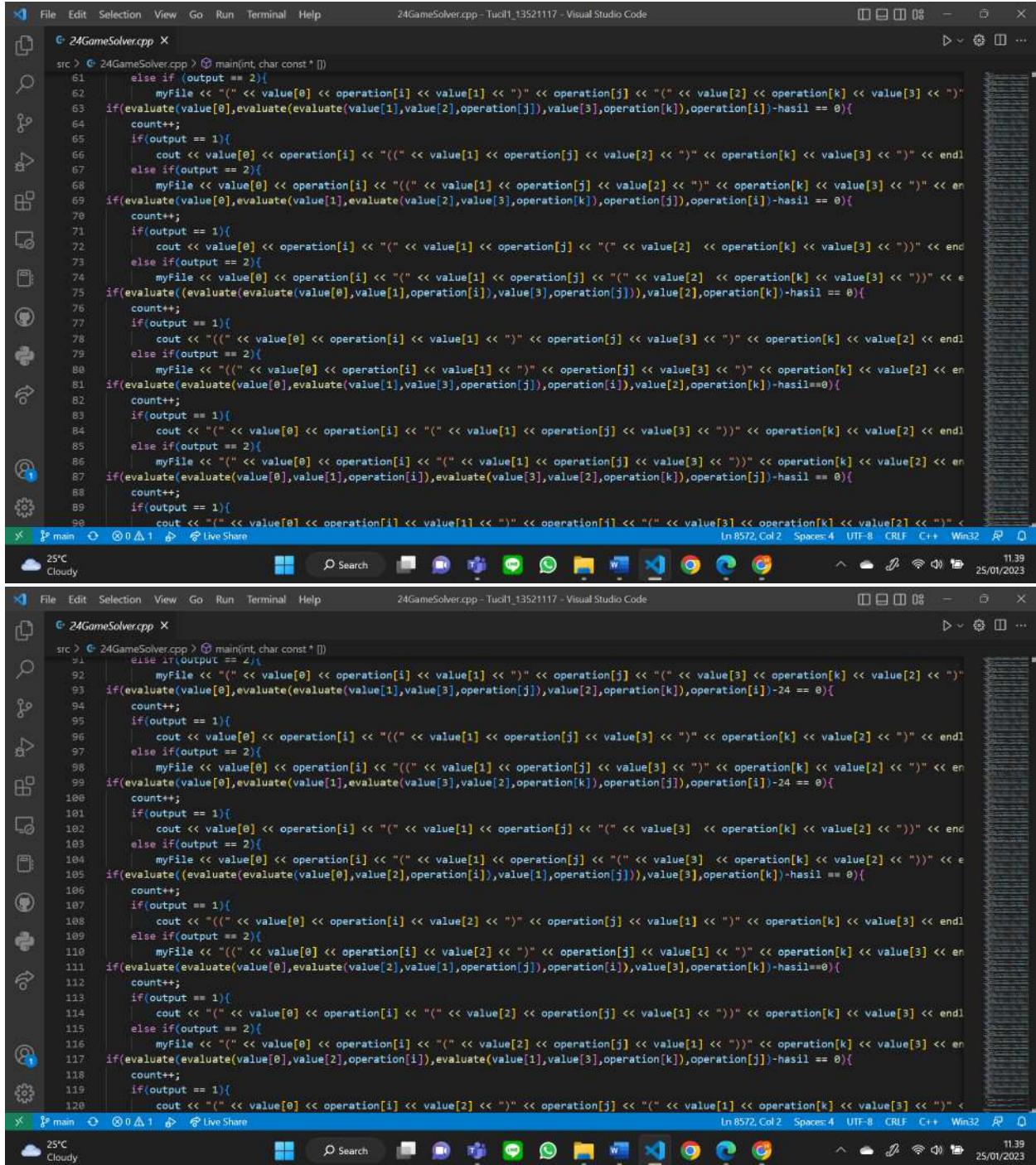


```

24GameSolver.cpp - Tucil1_13521117 - Visual Studio Code
File Edit Selection View Go Run Terminal Help
src > 24GameSolver.cpp > main(int, char const *[])
31     cin >> output;
32     clock_t startTime = clock();
33     ofstream myFile;
34     if(output == 2){
35         string namaFile;string file;cout << " file : " << endl;cin >> namaFile;
36         file = "../test/" + namaFile;
37         myFile.open(file);
38     operation[0] = '+';operation[1] = '-';operation[2] = '*';operation[3] = '/';
39     selectionSort(value,4);
40     int count = 0,int hasil = 24;
41     if(value[0] != value[1] && value[0] != value[2] && value[0] != value[3] && value[1] != value[2] && value[1] != value[3] && value[2] != value[3])
42     for(int i = 0; i < 4; i++){
43         for(int j = 0; j < 4; j++){
44             for(int k = 0; k < 4; k++){
45                 if(evaluate(evaluate(evaluate(value[0],value[1],operation[i],value[2],operation[j]),value[3],operation[k])-hasil == 0){
46                     count++;
47                     if(output == 1){
48                         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")" << operation[k] <<
49                     else if(output == 2){
50                         myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")" << operation[k] <<
51                     if(evaluate(evaluate(value[0],evaluate(value[1],value[2],operation[i],value[3],operation[k]),value[4])-hasil==0{
52                         count++;
53                         if(output == 1){
54                             cout << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" << operation[k] <<
55                         else if(output == 2){
56                             myFile << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" << operation[k] <<
57                         if(evaluate(evaluate(value[0],value[1],operation[i],evaluate(value[2],value[3],operation[k],operation[j])-hasil == 0){
58                             count++;
59                             if(output == 1){
59                             cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2] << operation[k] <<
60                         }
61                     }
62                 }
63             }
64         }
65     }
66 }

```

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The image displays two side-by-side screenshots of the Visual Studio Code (VS Code) interface, both showing the same C++ file named `24GameSolver.cpp`.

Top Screenshot (Bug Present):

```
src > 24GameSolver.cpp > main(int, char const*[])
61     else if (output == 2){
62         myfile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2] << operation[k] << value[3] << ")"
63     if(evaluate(value[0],evaluate(evaluate(value[1],value[2],operation[j]),value[3],operation[k]),operation[i])-hasil == 0){
64         count++;
65         if(output == 1){
66             cout << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" << operation[k] << value[3] << ")" << endl
67         else if(output == 2){
68             myfile << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" << operation[k] << value[3] << ")" << endl
69     if(evaluate(value[0],evaluate(value[1],evaluate(value[2],value[3],operation[k]),operation[j]),operation[i])-hasil == 0){
70         count++;
71         if(output == 1){
72             cout << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2] << operation[k] << value[3] << ")" << endl
73         else if(output == 2){
74             myfile << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2] << operation[k] << value[3] << ")" << endl
75     if(evaluate((evaluate(evaluate(value[0],value[1],operation[i]),value[3],operation[j])),value[2],operation[k])-hasil == 0){
76         count++;
77         if(output == 1){
78             cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[3] << ")" << operation[k] << value[2] << endl
79         else if(output == 2){
80             myfile << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] << value[2] << endl
81     if(evaluate(evaluate(value[0],evaluate(value[1],value[3],operation[j]),operation[i]),value[2],operation[k])-hasil == 0){
82         count++;
83         if(output == 1){
84             cout << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] << value[2] << endl
85         else if(output == 2){
86             myfile << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] << value[2] << endl
87     if(evaluate(evaluate(value[0],value[1],operation[i]),evaluate(value[3],value[2],operation[k]),operation[j])-hasil == 0){
88         count++;
89         if(output == 1){
90             cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "/" << value[3] << operation[k] << value[2] << ")" << endl

```

Bottom Screenshot (Bug Fixed):

```
src > 24GameSolver.cpp > main(int, char const*[])
71         else if (output == 2){
72             myfile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[3] << operation[k] << value[2] << ")"
73     if(evaluate(value[0],evaluate(evaluate(value[1],value[3],operation[j]),value[2],operation[k]),operation[i])-24 == 0){
74         count++;
75         if(output == 1){
76             cout << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] << value[2] << ")" << endl
77         else if(output == 2){
78             myfile << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] << value[2] << ")" << endl
79     if(evaluate(value[0],evaluate(value[1],evaluate(value[3],value[2],operation[k]),operation[j]),operation[i])-24 == 0){
80         count++;
81         if(output == 1){
82             cout << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[3] << operation[k] << value[2] << ")" << endl
83         else if(output == 2){
84             myfile << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[3] << operation[k] << value[2] << ")" << endl
85     if(evaluate((evaluate(evaluate(value[0],value[2],operation[i]),value[1],operation[j])),value[3],operation[k])-hasil == 0){
86         count++;
87         if(output == 1){
88             cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[1] << ")" << operation[k] << value[3] << endl
89         else if(output == 2){
90             myfile << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k] << value[3] << endl
91     if(evaluate(evaluate(value[0],evaluate(value[2],value[1],operation[i]),operation[j]),value[3],operation[k])-hasil == 0){
92         count++;
93         if(output == 1){
94             cout << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k] << value[3] << endl
95         else if(output == 2){
96             myfile << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k] << value[3] << endl
97     if(evaluate(evaluate(value[0],evaluate(value[2],value[3],operation[i]),value[1],operation[j]),value[3],operation[k])-24 == 0){
98         count++;
99         if(output == 1){
100            cout << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[3] << operation[k] << value[2] << ")" << endl
101        else if(output == 2){
102            myfile << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[3] << operation[k] << value[2] << ")" << endl
103        if(evaluate((evaluate(evaluate(value[0],value[3],operation[i]),value[2],operation[j])),value[1],operation[j])-hasil == 0){
104            count++;
105            if(output == 1){
106                cout << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << value[1] << ")" << operation[k] << value[2] << endl
107            else if(output == 2){
108                myfile << "(" << value[0] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")" << operation[k] << value[2] << endl
109            if(evaluate(evaluate(value[0],evaluate(value[3],value[2],operation[i]),value[1],operation[j]),value[3],operation[k])-24 == 0){
110                count++;
111                if(output == 1){
112                    cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[1] << ")" << operation[k] << value[3] << endl
113                else if(output == 2){
114                    myfile << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k] << value[3] << endl
115                if(evaluate((evaluate(evaluate(value[0],value[2],operation[i]),value[3],operation[j])),value[1],operation[j])-hasil == 0){
116                    count++;
117                    if(output == 1){
118                        cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[1] << operation[k] << value[3] << ")" << endl
119                    else if(output == 2){
120                        myfile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[1] << operation[k] << value[3] << ")" << endl

```

IF2211 Strategi Algoritma

```
src > 24GameSolver.cpp > main(int, char const *[])
121     else if(output == 2){
122         myfile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[1] << operation[k] << value[3] << ")"
123     if(evaluate(value[0],evaluate(evaluate(value[2],value[1],operation[j]),value[3],operation[k]),operation[i])-24 == 0){
124         count++;
125         if(output == 1){
126             cout << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k] << value[3] << ")"
127         else if(output == 2){
128             myfile << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k] << value[3] << ")"
129     if(evaluate(value[0],evaluate(value[2],evaluate(value[1],value[3],operation[k]),operation[j]),operation[i])-24 == 0){
130         count++;
131         if(output == 1){
132             cout << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[1] << operation[k] << value[3] << ")"
133         else if(output == 2){
134             myfile << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[1] << operation[k] << value[3] << ")"
135     if(evaluate(evaluate(value[0],value[2],operation[i]),value[3],operation[j]),value[1],operation[k])-hasil == 0){
136         count++;
137         if(output == 1){
138             cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[3] << ")"
139         else if(output == 2){
140             myfile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[3] << ")"
141     if(evaluate(evaluate(value[0],evaluate(value[2],value[3],operation[i]),operation[j]),value[1],operation[k])-hasil == 0){
142         count++;
143         if(output == 1){
144             cout << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k] << value[1] << endl
145         else if(output == 2){
146             myfile << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k] << value[1] << endl
147     if(evaluate(evaluate(value[0],value[2],operation[i]),evaluate(value[3],value[1],operation[k]),operation[j])-hasil == 0){
148         count++;
149         if(output == 1){
150             cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[3] << operation[k] << value[1] << ")"
151     else if(output == 2){
152         myfile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[3] << operation[k] << value[1] << ")"
153     if(evaluate(value[0],evaluate(evaluate(value[2],value[3],operation[j]),value[1],operation[k]),operation[i])-24 == 0){
154         count++;
155         if(output == 1){
156             cout << value[0] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k] << value[1] << ")"
157         else if(output == 2){
158             myfile << value[0] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k] << value[1] << ")"
159     if(evaluate(value[0],evaluate(value[2],evaluate(value[3],value[1],operation[k]),operation[j]),operation[i])-24 == 0){
160         count++;
161         if(output == 1){
162             cout << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[3] << operation[k] << value[1] << ")" << endl
163         else if(output == 2){
164             myfile << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[3] << operation[k] << value[1] << ")" << endl
165     if(evaluate(evaluate(value[0],value[3],operation[i]),value[1],operation[j]),value[2],operation[k])-hasil == 0){
166         count++;
167         if(output == 1){
168             cout << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << value[1] << ")"
169         else if(output == 2){
170             myfile << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << value[1] << ")"
171     if(evaluate(evaluate(value[0],evaluate(value[3],value[1],operation[i]),operation[j]),value[2],operation[k])-hasil == 0){
172         count++;
173         if(output == 1){
174             cout << "(" << value[0] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")" << operation[k] << value[2] << endl
175         else if(output == 2){
176             myfile << "(" << value[0] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")" << operation[k] << value[2] << endl
177     if(evaluate(evaluate(value[0],value[3],operation[i]),evaluate(value[1],value[2],operation[k]),operation[j])-hasil == 0){
178         count++;
179         if(output == 1){
180             cout << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << "(" << value[1] << operation[k] << value[2] << ")" <<
```

IF2211 Strategi Algoritma

```
src > 24GameSolver.cpp > main(int, char const*[])
181     else if(output == 2){
182         myfile << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << "(" << value[1] << operation[k] << value[2] << ")"
183     if(evaluate(value[0],evaluate(evaluate(value[3],value[1],operation[j]),value[2],operation[k]),operation[i])-24 == 0){
184         count++;
185         if(output == 1){
186             cout << value[0] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")" << operation[k] << value[2] << ")" << endl;
187         else if(output == 2){
188             myfile << value[0] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")" << operation[k] << value[2] << ")" << endl;
189     if(evaluate(value[0],evaluate(value[3],evaluate(value[1],value[2],operation[k]),operation[j]),operation[i])-24 == 0){
190         count++;
191         if(output == 1){
192             cout << value[0] << operation[i] << "(" << value[3] << operation[j] << "(" << value[1] << operation[k] << value[2] << ")" << endl;
193         else if(output == 2){
194             myfile << value[0] << operation[i] << "(" << value[3] << operation[j] << "(" << value[1] << operation[k] << value[2] << ")" << endl;
195 //Permutasi 6
196     if(evaluate((evaluate(evaluate(value[0],value[3],operation[i]),value[2],operation[j])),value[1],operation[k])-hasil == 0){
197         count++;
198         if(output == 1){
199             cout << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << value[2] << ")" << operation[k] << value[1] << endl;
200         else if(output == 2){
201             myfile << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << value[2] << ")" << operation[k] << value[1] << endl;
202     if(evaluate(evaluate(value[0],evaluate(value[3],value[2],operation[j]),operation[i]),value[1],operation[k])-hasil==0){
203         count++;
204         if(output == 1){
205             cout << "(" << value[0] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")" << operation[k] << value[1] << endl;
206         else if(output == 2){
207             myfile << "(" << value[0] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")" << operation[k] << value[1] << endl;
208     if(evaluate(evaluate(value[0],value[3],operation[i]),evaluate(value[2],value[1],operation[k]),operation[j])-hasil == 0){
209         count++;
210         if(output == 1){
```



```
src > 24GameSolver.cpp > main(int, char const*[])
211         cout << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << "(" << value[2] << operation[k] << value[1] << ")" << endl;
212     else if(output == 2){
213         myfile << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << "(" << value[2] << operation[k] << value[1] << ")" << endl;
214     if(evaluate(value[0],evaluate(evaluate(value[3],value[2],operation[j]),value[1],operation[k]),operation[i])-24 == 0){
215         count++;
216         if(output == 1){
217             cout << value[0] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")" << operation[k] << value[1] << endl;
218         else if(output == 2){
219             myfile << value[0] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")" << operation[k] << value[1] << endl;
220     if(evaluate(evaluate(value[0],evaluate(value[3],evaluate(value[2],value[1],operation[k]),operation[j]),operation[i])-24 == 0){
221         count++;
222         if(output == 1){
223             cout << value[0] << operation[i] << "(" << value[3] << operation[j] << "(" << value[2] << operation[k] << value[1] << ")" << endl;
224         else if(output == 2){
225             myfile << value[0] << operation[i] << "(" << value[3] << operation[j] << "(" << value[2] << operation[k] << value[1] << ")" << endl;
226     if(evaluate((evaluate(evaluate(value[1],value[0],operation[i]),value[2],operation[j])),value[3],operation[k])-hasil == 0){
227         count++;
228         if(output == 1){
229             cout << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << value[2] << ")" << operation[k] << value[3] << endl;
230         else if(output == 2){
231             myfile << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << value[2] << ")" << operation[k] << value[3] << endl;
232     if(evaluate(evaluate(value[1],evaluate(value[0],value[2],operation[j]),operation[i]),value[3],operation[k])-hasil==0){
233         count++;
234         if(output == 1){
235             cout << "(" << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")" << operation[k] << value[3] << endl;
236         else if(output == 2){
237             myfile << "(" << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")" << operation[k] << value[3] << endl;
238     if(evaluate(evaluate(value[1],value[0],operation[i]),evaluate(value[2],value[3],operation[k]),operation[j])-hasil == 0){
239         count++;
240         if(output == 1){
```

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```
src > 24GameSolver.cpp > main(int, char const[])
241     cout << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << "(" << value[2] << operation[k] << value[3] << ")"
242     else if(output == 2){
243         myFile << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << "(" << value[2] << operation[k] << value[3] << ")"
244     if(evaluate(value[1],evaluate(evaluate(value[0],value[2],operation[j]),value[3],operation[k]),operation[i])-24 == 0){
245         count++;
246         if(output == 1){
247             cout << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")" << operation[k] << value[3] << ")" << endl;
248         else if(output == 2){
249             myFile << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << operation[k] << value[3] << ")" << endl;
250     if(evaluate(value[1],evaluate(value[0],evaluate(value[2],value[3],operation[k]),operation[j]),operation[i])-24 == 0){
251         count++;
252         if(output == 1){
253             cout << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[2] << operation[k] << value[3] << ")" << endl;
254         else if(output == 2){
255             myFile << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[2] << operation[k] << value[3] << ")" << endl;
256     if(evaluate((evaluate(evaluate(value[1],value[0],operation[i]),value[3],operation[j])),value[2],operation[k])-hasil == 0){
257         count++;
258         if(output == 1){
259             cout << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << value[3] << ")" << operation[k] << value[2] << endl;
260         else if(output == 2){
261             myFile << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << value[3] << ")" << operation[k] << value[2] << endl;
262     if(evaluate(evaluate(value[1],evaluate(value[0],value[3],operation[i]),value[2],operation[j]),operation[i],value[2],operation[k])-hasil == 0){
263         count++;
264         if(output == 1){
265             cout << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << value[3] << ")" << operation[k] << value[2] << endl;
266         else if(output == 2){
267             myFile << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << value[3] << ")" << operation[k] << value[2] << endl;
268     if(evaluate(evaluate(value[1],value[0],operation[i]),evaluate(value[3],value[2],operation[k]),operation[j])-hasil == 0){
269         count++;
270         if(output == 1){
271             cout << value[1] << operation[i] << value[0] << ")" << operation[j] << value[3] << ")" << operation[k] << value[2] << ")" << endl;
272         else if(output == 2){
273             myFile << value[1] << operation[i] << value[0] << ")" << operation[j] << "(" << value[3] << operation[k] << value[2] << ")"
274     if(evaluate(value[1],evaluate(evaluate(value[0],value[3],operation[i]),value[2],operation[k]),operation[i])-24 == 0){
275         count++;
276         if(output == 1){
277             cout << value[1] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")" << operation[k] << value[2] << endl;
278         else if(output == 2){
279             myFile << value[1] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")" << operation[k] << value[2] << endl;
280     if(evaluate(value[1],evaluate(value[0],evaluate(value[3],value[2],operation[k]),operation[j]),operation[i])-24 == 0){
281         count++;
282         if(output == 1){
283             cout << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[3] << operation[k] << value[2] << ")" << endl;
284         else if(output == 2){
285             myFile << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[3] << operation[k] << value[2] << ")" << endl;
286     if(evaluate((evaluate(evaluate(value[1],value[2],operation[i]),value[0],operation[j])),value[3],operation[k])-hasil == 0){
287         count++;
288         if(output == 1){
289             cout << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << value[0] << ")" << operation[k] << value[3] << endl;
290         else if(output == 2){
291             myFile << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << value[0] << ")" << operation[k] << value[3] << endl;
292     if(evaluate(evaluate(value[1],evaluate(value[2],value[0],operation[i]),value[3],operation[j]),operation[i],value[3],operation[k])-hasil == 0){
293         count++;
294         if(output == 1){
295             cout << value[1] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")" << operation[k] << value[3] << endl;
296         else if(output == 2){
297             myFile << value[1] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")" << operation[k] << value[3] << endl;
298     if(evaluate(evaluate(value[1],value[2],operation[i]),evaluate(value[0],value[3],operation[k]),operation[j])-hasil == 0){
299         count++;
300         if(output == 1){
```

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```
src > 24GameSolver.cpp > main(int, char const[])
    cout << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << "(" << value[0] << operation[k] << value[3] << ")"
362    else if(output == 2){
363        myfile << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << "(" << value[0] << operation[k] << value[3] << ")"
364    if(evaluate(value[1],evaluate(evaluate(value[2],value[0],operation[j]),value[3],operation[k]),operation[i])-24 == 0){
365        count++;
366        if(output == 1){
367            cout << value[1] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")" << operation[k] << value[3] << ")"
368        else if(output == 2){
369            myfile << value[1] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")" << operation[k] << value[3] << ")"
370        if(evaluate(value[1],evaluate(value[2],value[0],value[3],operation[k]),operation[j]),operation[i])-24 == 0){
371            count++;
372            if(output == 1){
373                cout << value[1] << operation[i] << "(" << value[2] << operation[j] << "(" << value[0] << operation[k] << value[3] << ")"
374            else if(output == 2){
375                myfile << value[1] << operation[i] << "(" << value[2] << operation[j] << "(" << value[0] << operation[k] << value[3] << ")"
376            if(evaluate((evaluate(evaluate(value[1],value[2],operation[i]),value[3],operation[j])),value[0],operation[k])-hasil == 0){
377                count++;
378                if(output == 1){
379                    cout << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << "(" << value[3] << operation[k] << value[0] << ")"
380                else if(output == 2){
381                    myfile << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << "(" << value[3] << operation[k] << value[0] << ")"
382                if(evaluate(evaluate(value[1],value[2],operation[i]),evaluate(value[3],value[0],operation[k]),operation[j])-hasil == 0){
383                    count++;
384                    if(output == 1){
385                        cout << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << "(" << value[3] << operation[k] << value[0] << ")"
386                    else if(output == 2){
387                        myfile << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << "(" << value[3] << operation[k] << value[0] << ")"
388                    if(evaluate(evaluate(value[1],value[2],operation[i]),evaluate(value[3],value[0],operation[k]),operation[j])-hasil == 0){
389                        count++;
390                        if(output == 1){
```

IF2211 Strategi Algoritma

```
src > 24GameSolver.cpp > main(int, char const[])
361     cout << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << "(" << value[2] << operation[k] << value[0] << ")"
362     else if(output == 2){
363         myfile << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << "(" << value[2] << operation[k] << value[0] << ")"
364         if(evaluate(value[1],evaluate(evaluate(value[3],value[2]),operation[j]),value[0],operation[k]),operation[i])-24 == 0){
365             count++;
366             if(output == 1){
367                 cout << value[1] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")" << operation[k] << value[0] << ")" << endl;
368             else if(output == 2){
369                 myfile << value[1] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")" << operation[k] << value[0] << ")" << endl;
370             if(evaluate(value[1],evaluate(value[3],evaluate(value[2],value[0]),operation[k]),operation[i]),operation[j])-24 == 0){
371                 count++;
372                 if(output == 1){
373                     cout << value[1] << operation[i] << "(" << value[3] << operation[j] << "(" << value[2] << operation[k] << value[0] << ")" << endl;
374                 else if(output == 2){
375                     myfile << value[1] << operation[i] << "(" << value[3] << operation[j] << "(" << value[2] << operation[k] << value[0] << ")" << endl;
376                     if(evaluate(evaluate(value[1],value[3],operation[i]),value[0],operation[j]),value[2],operation[k])-hasil == 0){
377                         count++;
378                         if(output == 1){
379                             cout << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << value[0] << ")" << operation[k] << value[2] << endl;
380                         else if(output == 2){
381                             myfile << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << value[0] << ")" << operation[k] << value[2] << endl;
382                             if(evaluate(evaluate(value[1],evaluate(value[3],value[0]),operation[i]),value[2],operation[j]),value[2],operation[k])-hasil == 0){
383                                 count++;
384                                 if(output == 1){
385                                     cout << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << value[0] << ")" << operation[k] << value[2] << endl;
386                                 else if(output == 2){
387                                     myfile << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << value[0] << ")" << operation[k] << value[2] << endl;
388                                     if(evaluate(evaluate(value[1],value[3],operation[i]),evaluate(value[0],value[2],operation[k]),operation[j])-hasil == 0){
389                                         count++;
390                                         if(output == 1){
```

```
src > 24GameSolver.cpp > main(int, char const[])
391     cout << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << "(" << value[0] << operation[k] << value[2] << ")"
392     else if(output == 2){
393         myfile << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << "(" << value[0] << operation[k] << value[2] << ")"
394         if(evaluate(value[1],evaluate(evaluate(value[3],value[0]),operation[j]),value[2],operation[k]),operation[i])-24 == 0){
395             count++;
396             if(output == 1){
397                 cout << value[1] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")" << operation[k] << value[2] << endl;
398             else if(output == 2){
399                 myfile << value[1] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")" << operation[k] << value[2] << endl;
400             if(evaluate(value[1],evaluate(value[3],evaluate(value[0],value[2]),operation[k]),operation[j]),operation[i])-24 == 0){
401                 count++;
402                 if(output == 1){
403                     cout << value[1] << operation[i] << "(" << value[3] << operation[j] << "(" << value[0] << operation[k] << value[2] << ")" << endl;
404                 else if(output == 2){
405                     myfile << value[1] << operation[i] << "(" << value[3] << operation[j] << "(" << value[0] << operation[k] << value[2] << ")" << endl;
406                     if(evaluate(evaluate(value[2],value[0],operation[i]),value[1],operation[j]),value[3],operation[k])-hasil == 0){
407                         count++;
408                         if(output == 1){
409                             cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << value[1] << ")" << operation[k] << value[3] << endl;
410                         else if(output == 2){
411                             myfile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << value[1] << ")" << operation[k] << value[3] << endl;
412                             if(evaluate(evaluate(value[2],evaluate(value[0],value[1]),operation[j]),operation[i]),value[3],operation[k])-hasil == 0{
413                                 count++;
414                                 if(output == 1){
415                                     cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << value[1] << ")" << operation[k] << value[3] << endl;
416                                 else if(output == 2){
417                                     myfile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << value[1] << ")" << operation[k] << value[3] << endl;
418                                     if(evaluate(evaluate(value[2],value[0],operation[i]),evaluate(value[1],value[3],operation[k]),operation[j])-hasil == 0){
419                                         count++;
420                                         if(output == 1){
```

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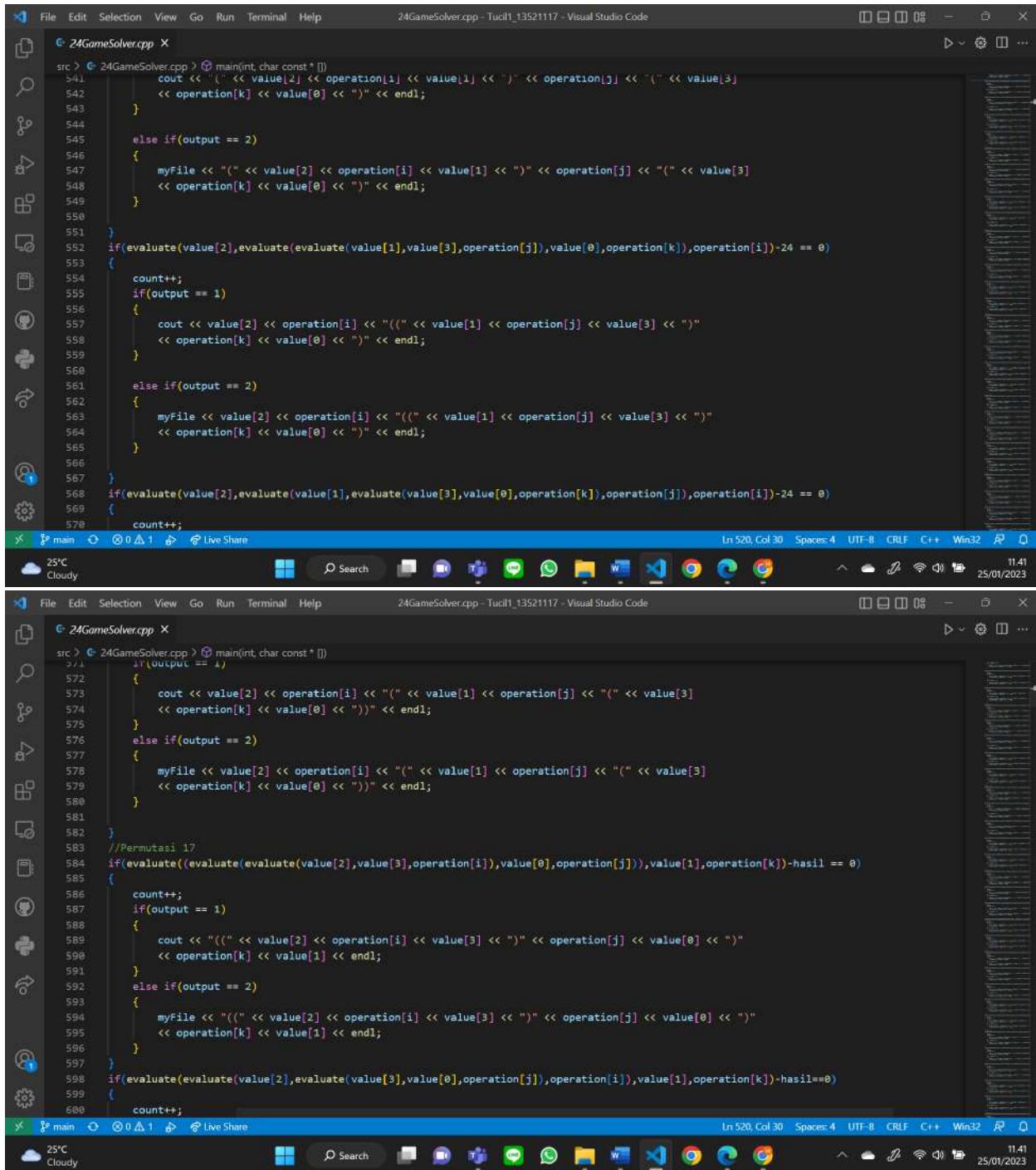
```
src > 24GameSolver.cpp > main(int, char const[])
421     cout << "(" << value[2] << operation[1] << value[0] << ")" << operation[j] << "(" << value[1] << operation[k] << value[3] << ")"
422     else if(output == 2){
423         myfile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[1] << operation[k] << value[3] << ")"
424     if(evaluate(value[2],evaluate(evaluate(value[0],value[1],operation[j]),value[3],operation[k]),operation[i])-24 == 0){
425         count++;
426         if(output == 1){
427             cout << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")" << operation[k] << value[3] << ")" << endl;
428         else if(output == 2){
429             myfile << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")" << operation[k] << value[3] << ")" << endl;
430         if(evaluate(value[2],evaluate(value[0],value[1],value[3],operation[k]),operation[j]),operation[i])-24 == 0){
431             count++;
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433                 cout << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[1] << operation[k] << value[3] << ")" << endl;
434             else if(output == 2){
435                 myfile << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[1] << operation[k] << value[3] << ")" << endl;
436             if(evaluate((evaluate(evaluate(value[2],value[0],operation[i]),value[3],operation[j])),value[1],operation[k])-hasil == 0){
437                 count++;
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439                     cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[1] << operation[k] << value[3] << ")" << endl;
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441                     myfile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[1] << operation[k] << value[3] << ")" << endl;
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445                     cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << value[3] << ")" << operation[k] << value[1] << endl;
446                 else if(output == 2){
447                     myfile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << value[3] << ")" << operation[k] << value[1] << endl;
448             if(evaluate(evaluate(value[2],value[0],operation[i]),evaluate(value[3],value[1],operation[k]),operation[j])-hasil == 0){
449                 count++;
450                 if(output == 1){
```

```
src > 24GameSolver.cpp > main(int, char const[])
451     cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[3] << operation[k] << value[1] << ")"
452     else if(output == 2){
453         myfile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[3] << operation[k] << value[1] << ")"
454     if(evaluate(value[2],evaluate(evaluate(value[0],value[3],operation[j]),value[1],operation[k]),operation[i])-24 == 0){
455         count++;
456         if(output == 1){
457             cout << value[2] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")" << operation[k] << value[1] << ")" << endl;
458         else if(output == 2){
459             myfile << value[2] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")" << operation[k] << value[1] << ")" << endl;
460         if(evaluate(evaluate(value[2],evaluate(value[0],value[3],operation[j]),value[1],operation[k]),operation[i])-24 == 0){
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462             if(output == 1){
463                 cout << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[3] << operation[k] << value[1] << ")" << endl;
464             else if(output == 2){
465                 myfile << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[3] << operation[k] << value[1] << ")" << endl;
466             if(evaluate((evaluate(evaluate(value[2],value[1],operation[i]),value[0],operation[j])),value[3],operation[k])-hasil == 0){
467                 count++;
468                 if(output == 1){
469                     cout << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << value[0] << ")" << operation[k] << value[3] << endl;
470                 else if(output == 2){
471                     myfile << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << value[0] << ")" << operation[k] << value[3] << endl;
472             if(evaluate(evaluate(value[2],evaluate(value[1],value[0],operation[j]),operation[i]),value[3],operation[k])-hasil == 0){
473                 count++;
474                 if(output == 1){
475                     cout << "(" << value[2] << operation[i] << "(" << value[1] << operation[j] << value[0] << ")" << operation[k] << value[3] << endl;
476                 else if(output == 2){
477                     myfile << "(" << value[2] << operation[i] << "(" << value[1] << operation[j] << value[0] << ")" << operation[k] << value[3] << endl;
478             if(evaluate(evaluate(value[2],value[1],operation[i]),evaluate(value[0],value[3],operation[j]),operation[k])-hasil == 0){
479                 count++;
480                 if(output == 1){
```

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```
src > 24GameSolver.cpp > main(int, char const[])
481     cout << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << "(" << value[0] << operation[k] << value[3] << ")"
482     else if(output == 2){
483         myFile << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << "(" << value[0] << operation[k] << value[3] << ")"
484         if(evaluate(value[2],evaluate(evaluate(value[1],value[0],operation[j]),value[3],operation[k]),operation[i])-24 == 0){
485             count++;
486             if(output == 1){
487                 cout << value[2] << operation[i] << "(" << value[1] << operation[j] << value[0] << operation[k] << value[3] << ")" << endl;
488             else if(output == 2){
489                 myFile << value[2] << operation[i] << "(" << value[1] << operation[j] << value[0] << ")" << operation[k] << value[3] << ")" << endl;
490             if(evaluate(value[2],evaluate(value[1],evaluate(value[0],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
491             {
492                 count++;
493                 if(output == 1)
494                 {
495                     cout << value[2] << operation[i] << "(" << value[1] << operation[j] << "(" << value[0]
496                     << operation[k] << value[3] << ")" << endl;
497                 }
498                 else if(output == 2)
499                 {
500                     myFile << value[2] << operation[i] << "(" << value[1] << operation[j] << "(" << value[0]
501                     << operation[k] << value[3] << ")" << endl;
502                 }
503             }
504             //Permutasi 16
505             if(evaluate(evaluate(value[2],evaluate(value[1],value[0],operation[i]),value[3],operation[j]),value[0],operation[k])-hasil == 0)
506             {
507                 count++;
508                 if(output == 1)
509                 {
510                     cout << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << value[3] << ")"
511                     << operation[k] << value[0] << endl;
512                 }
513             }
514             else if(output == 2)
515             {
516                 myFile << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << value[3] << ")"
517                 << operation[k] << value[0] << endl;
518             }
519         }
520     }
521     if(evaluate(evaluate(value[2],evaluate(value[1],value[3],operation[j]),operation[i]),value[0],operation[k])-hasil==0)
522     {
523         count++;
524         if(output == 1)
525         {
526             cout << "(" << value[2] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")"
527             << operation[k] << value[0] << endl;
528         }
529         else if(output == 2)
530         {
531             myFile << "(" << value[2] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")"
532             << operation[k] << value[0] << endl;
533         }
534     }
535 }
536 if(evaluate(evaluate(value[2],value[1],operation[i]),evaluate(value[3],value[0],operation[k]),operation[j])-hasil == 0)
537 {
538     count++;
539     if(output == 1)
540     {
```

IF2211 Strategi Algoritma



```
src > 24GameSolver.cpp > main(int, char const[])
541     cout << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << "(" << value[3]
542     << operation[k] << value[0] << ")" << endl;
543 }
544 else if(output == 2)
545 {
    myFile << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << "(" << value[3]
546     << operation[k] << value[0] << ")" << endl;
547 }
548 }
549 }
550 }
551 }
552 if(evaluate(value[2],evaluate(evaluate(value[1],value[3],operation[j]),value[0],operation[k]),operation[i])-24 == 0)
553 {
    count++;
    if(output == 1)
    {
        cout << value[2] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")"
554         << operation[k] << value[0] << ")" << endl;
555     }
556     else if(output == 2)
    {
        myFile << value[2] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")"
557         << operation[k] << value[0] << ")" << endl;
558     }
559 }
560 }
561 }
562 if(evaluate(value[2],evaluate(value[1],evaluate(value[3],value[0],operation[k]),operation[j]),operation[i])-24 == 0)
563 {
    count++;
564 }
565 }
566 }
567 }
568 if(evaluate(value[2],evaluate(value[1],evaluate(value[3],value[0],operation[k]),operation[j]),operation[i])-24 == 0)
569 {
    count++;
570 }
571 }

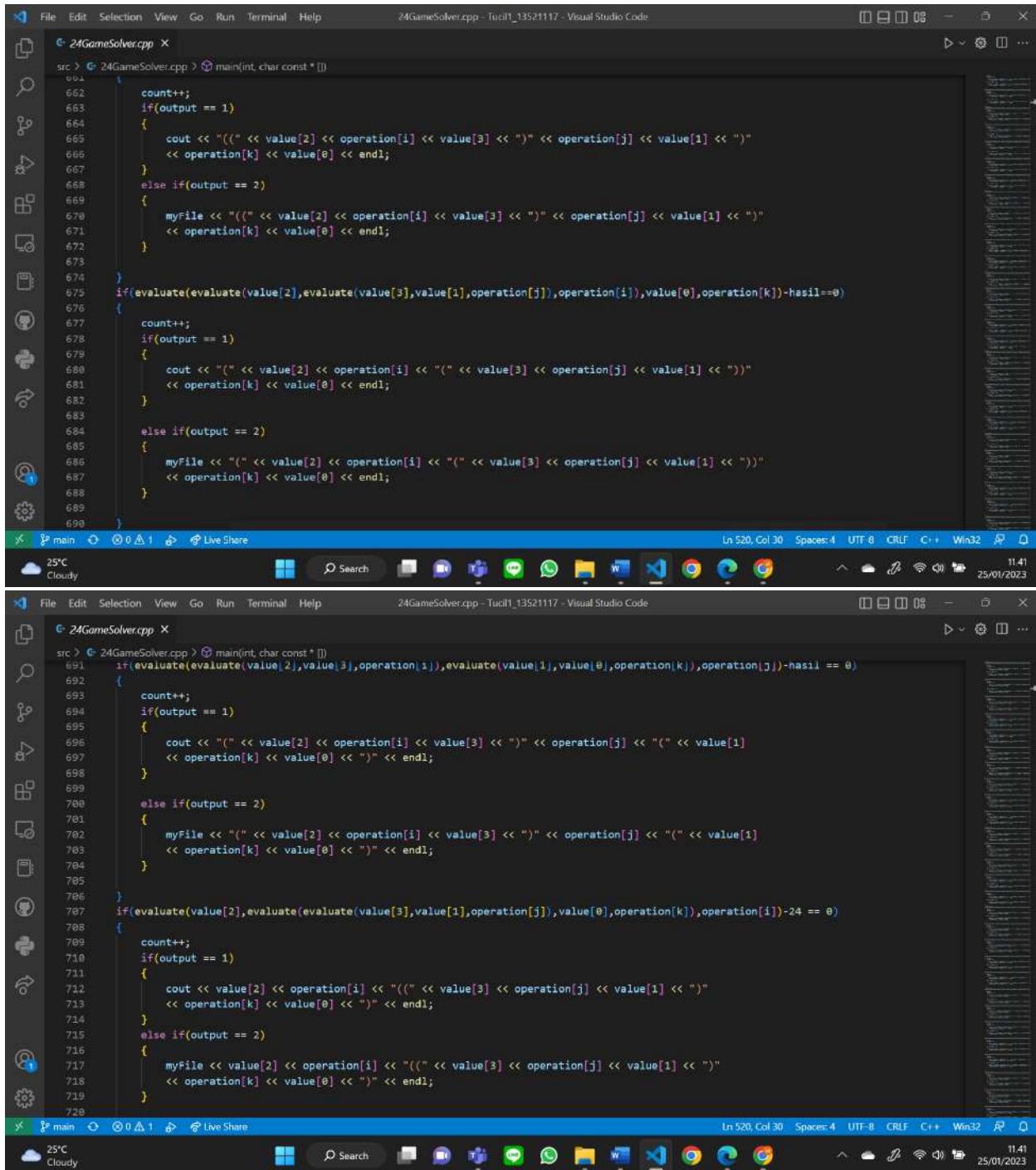
//Permutasi 17
572 if(evaluate((evaluate(evaluate(value[2],value[3],operation[i]),value[0],operation[j])),value[1],operation[k])-hasil == 0)
573 {
    count++;
    if(output == 1)
    {
        cout << value[2] << operation[i] << "(" << value[1] << operation[j] << "(" << value[3]
574         << operation[k] << value[0] << ")" << endl;
575     }
576     else if(output == 2)
    {
        myFile << value[2] << operation[i] << "(" << value[1] << operation[j] << "(" << value[3]
577         << operation[k] << value[0] << ")" << endl;
578     }
579 }
580 }
581 }
582 }
583 //Permutasi 17
584 if(evaluate((evaluate(evaluate(value[2],value[3],operation[i]),value[0],operation[j])),value[1],operation[k])-hasil == 0)
585 {
    count++;
    if(output == 1)
    {
        cout << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << value[0] << ")"
586         << operation[k] << value[1] << endl;
587     }
588     else if(output == 2)
    {
        myFile << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << value[0] << ")"
589         << operation[k] << value[1] << endl;
590     }
591 }
592 if(evaluate(evaluate(value[2],evaluate(value[3],value[0],operation[j]),operation[i]),value[1],operation[k])-hasil==0)
593 {
    count++;
594 }
595 }
```

```

File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TUDIT_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
661     if(output == 1)
662     {
663         cout << "(" << value[2] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")"
664             << operation[k] << value[1] << endl;
665     }
666     else if(output == 2)
667     {
668         myFile << "(" << value[2] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")"
669             << operation[k] << value[1] << endl;
670     }
671 }
672 if(evaluate(evaluate(value[2],value[3],operation[i]),evaluate(value[0],value[1],operation[k]),operation[j])-hasil == 0)
673 {
674     count++;
675     if(output == 1)
676     {
677         cout << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << "(" << value[0]
678             << operation[k] << value[1] << ")" << endl;
679     }
680     else if(output == 2)
681     {
682         myFile << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << "(" << value[0]
683             << operation[k] << value[1] << ")" << endl;
684     }
685 }
686 }
687 if(evaluate(value[2],evaluate(evaluate(value[3],value[0],operation[j]),value[1],operation[k]),operation[i])-24 == 0)
688 {
689     count++;
690 }
25°C Cloudy Ln 520, Col 30 Spaces: 4 UTF-8 CRLF C++ Win32 Live Share 11.41 25/01/2023
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TUDIT_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
631     if(output == 1)
632     {
633         cout << value[2] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")"
634             << operation[k] << value[1] << ")" << endl;
635     }
636     else if(output == 2)
637     {
638         myFile << value[2] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")"
639             << operation[k] << value[1] << ")" << endl;
640     }
641 }
642 if(evaluate(value[2],evaluate(value[3],evaluate(value[0],value[1],operation[k]),operation[j]),operation[i])-24 == 0)
643 {
644     count++;
645     if(output == 1)
646     {
647         cout << value[2] << operation[i] << "(" << value[3] << operation[j] << "(" << value[0]
648             << operation[k] << value[1] << ")" << endl;
649     }
650     else if(output == 2)
651     {
652         myFile << value[2] << operation[i] << "(" << value[3] << operation[j] << "(" << value[0]
653             << operation[k] << value[1] << ")" << endl;
654     }
655 }
656 //Permutasi 1B
657 if(evaluate((evaluate(evaluate(value[2],value[3],operation[i]),value[1],operation[j])),value[0],operation[k])-hasil == 0)
658 {
659     count++;
660 }
25°C Cloudy Ln 520, Col 30 Spaces: 4 UTF-8 CRLF C++ Win32 Live Share 11.41 25/01/2023

```

IF2211 Strategi Algoritma



```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const[])
661     count++;
662     if(output == 1)
663     {
664         cout << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << value[1] << ")"
665         << operation[k] << value[0] << endl;
666     }
667     else if(output == 2)
668     {
669         myFile << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << value[1] << ")"
670         << operation[k] << value[0] << endl;
671     }
672 }
673
674 if(evaluate(evaluate(value[2],evaluate(value[3],value[i],operation[j]),operation[i]),value[0],operation[k])-hasil==0)
675 {
676     count++;
677     if(output == 1)
678     {
679         cout << "(" << value[2] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")"
680         << operation[k] << value[0] << endl;
681     }
682
683     else if(output == 2)
684     {
685         myFile << "(" << value[2] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")"
686         << operation[k] << value[0] << endl;
687     }
688 }
689
690 }
```

```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const[])
691     if(evaluate(evaluate(value[2],value[3],operation[i]),evaluate(value[1],value[0],operation[k]),operation[j])-hasil == 0)
692     {
693         count++;
694         if(output == 1)
695         {
696             cout << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << "(" << value[1]
697             << operation[k] << value[0] << ")" << endl;
698         }
699
700         else if(output == 2)
701         {
702             myFile << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << "(" << value[1]
703             << operation[k] << value[0] << ")" << endl;
704         }
705
706     }
707     if(evaluate(value[2],evaluate(evaluate(value[3],value[1],operation[j]),value[0],operation[k]),operation[i])-24 == 0)
708     {
709         count++;
710         if(output == 1)
711         {
712             cout << value[2] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")"
713             << operation[k] << value[0] << endl;
714         }
715         else if(output == 2)
716         {
717             myFile << value[2] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")"
718             << operation[k] << value[0] << ")" << endl;
719         }
720     }
721 }
```

IF2211 Strategi Algoritma

```
src > 24GameSolver.cpp > main(int, char const[])
722     if(evaluate(value[2],evaluate(value[3],evaluate(value[1],value[0],operation[k]),operation[j]),operation[i])-24 == 0)
723     {
724         count++;
725         if(output == 1)
726         {
727             cout << value[2] << operation[i] << "(" << value[3] << operation[j] << "(" << value[1]
728             << operation[k] << value[0] << ")" ) << endl;
729         }
730         else if(output == 2)
731         {
732             myFile << value[2] << operation[i] << "(" << value[3] << operation[j] << "(" << value[1]
733             << operation[k] << value[0] << ")" ) << endl;
734         }
735     }
736 }
737 //Permutasi 19
738 if(evaluate((evaluate(evaluate(value[3],value[0],operation[i]),value[1],operation[j]),value[2],operation[k])-hasil == 0)
739 {
740     count++;
741     if(output == 1)
742     {
743         cout << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << value[1] << ")"
744         << operation[k] << value[2] << endl;
745     }
746     else if(output == 2)
747     {
748         myFile << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << value[1] << ")"
749         << operation[k] << value[2] << endl;
750     }
751 }
752 if(evaluate(evaluate(value[3],evaluate(value[0],value[1],operation[i]),operation[j]),value[2],operation[k])-hasil==0)
753 {
754     count++;
755     if(output == 1)
756     {
757         cout << "(" << value[3] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
758         << operation[k] << value[2] << endl;
759     }
760     else if(output == 2)
761     {
762         myFile << "(" << value[3] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
763         << operation[k] << value[2] << endl;
764     }
765 }
766 if(evaluate(evaluate(value[3],value[0],operation[i]),evaluate(value[1],value[2],operation[k]),operation[j])-hasil == 0)
767 {
768     count++;
769     if(output == 1)
770     {
771         cout << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << "(" << value[1]
772         << operation[k] << value[2] << ")" << endl;
773     }
774     else if(output == 2)
775     {
776         myFile << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << "(" << value[1]
777         << operation[k] << value[2] << ")" << endl;
778     }
779 }
```

IF2211 Strategi Algoritma

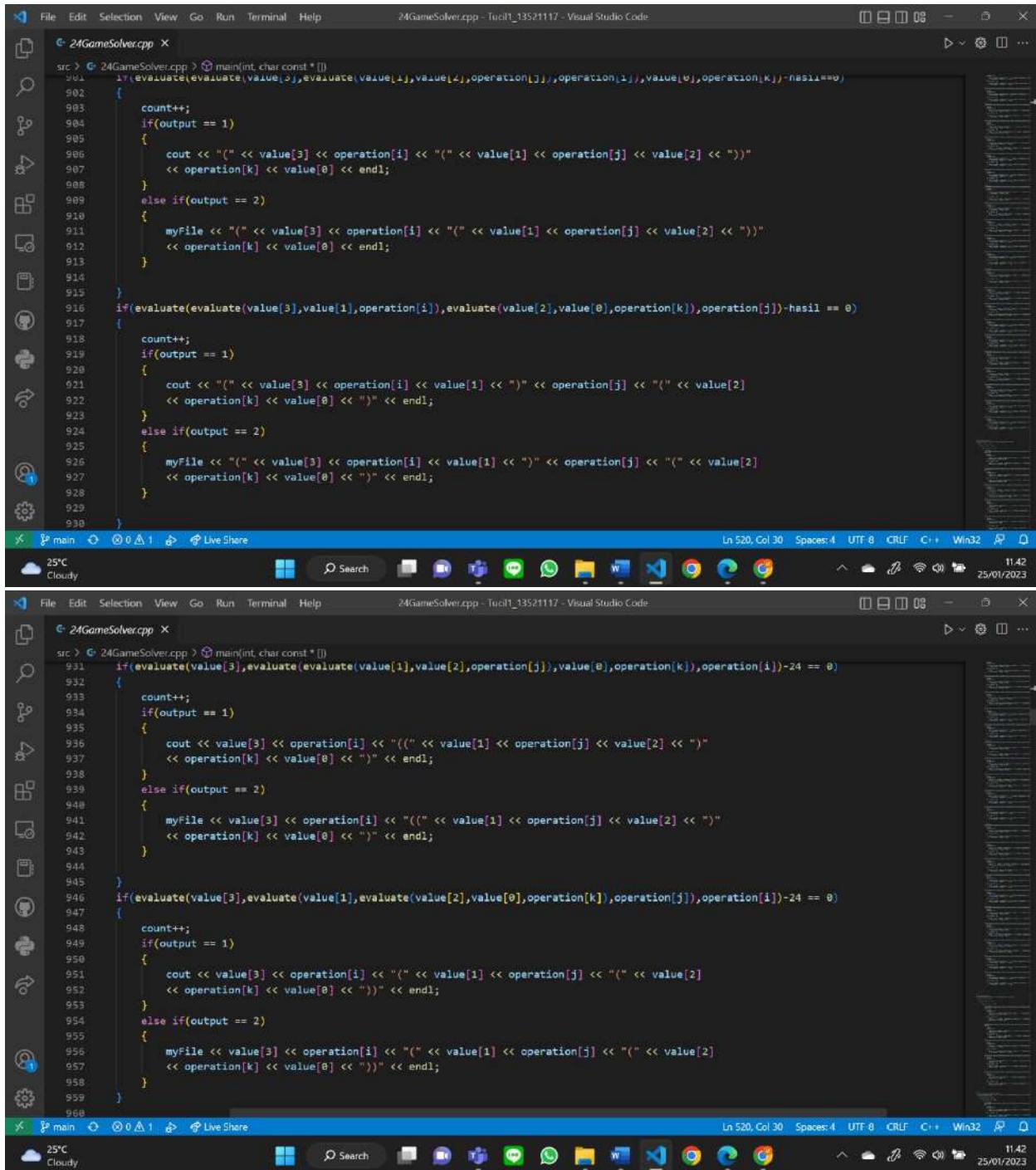
```
24GameSolver.cpp //Permutasi 28
src > 24GameSolver.cpp > main(int, char const *[])
811
812     if(evaluate(evaluate(value[3],evaluate(value[0],value[1],operation[i]),value[2],operation[j]),value[1],operation[k])-hasil == 0)
813     {
814         count++;
815         if(output == 1)
816         {
817             cout << "(" << value[3] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
818             << operation[k] << value[2] << ")" << endl;
819         }
820         else if(output == 2)
821         {
822             myfile << value[3] << operation[i] << "(" << value[0] << operation[j] << "(" << value[1]
823             << operation[k] << value[2] << ")" << endl;
824         }
825     }
826     if(evaluate(evaluate(value[3],evaluate(value[0],value[2],operation[j]),operation[i]),value[1],operation[k])-hasil==0)
827     {
828         count++;
829         if(output == 1)
830         {
831             cout << "(" << value[3] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")"
832             << operation[k] << value[1] << endl;
833         }
834         else if(output == 2)
835         {
836             myfile << "(" << value[3] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")"
837             << operation[k] << value[1] << endl;
838         }
839     }
840 }
```

IF2211 Strategi Algoritma

```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const *[])
841 }
842 if(evaluate(evaluate(value[3],value[0],operation[i]),evaluate(value[2],value[1],operation[k]),operation[j])-hasil == 0)
843 {
844     count++;
845     if(output == 1)
846     {
847         cout << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << "(" << value[2]
848         << operation[k] << value[1] << ")" << endl;
849     }
850     else if(output == 2)
851     {
852         myFile << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << "(" << value[2]
853         << operation[k] << value[1] << ")" << endl;
854     }
855 }
856 if(evaluate(value[3],evaluate(evaluate(value[0],value[2],operation[j]),value[1],operation[k]),operation[i])-24 == 0)
857 {
858     count++;
859     if(output == 1)
860     {
861         cout << value[3] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")"
862         << operation[k] << value[1] << ")" << endl;
863     }
864     else if(output == 2)
865     {
866         myFile << value[3] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")"
867         << operation[k] << value[1] << ")" << endl;
868     }
869 }
870 }

//Permutasi 21
if(evaluate(evaluate(value[3],value[1],operation[i]),value[2],operation[j]),value[0],operation[k])-hasil == 0)
{
    count++;
    if(output == 1)
    {
        cout << "(" << value[3] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")"
        << operation[k] << value[0] << endl;
    }
    else if(output == 2)
    {
        myFile << "(" << value[3] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")"
        << operation[k] << value[0] << endl;
    }
}
871
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```

IF2211 Strategi Algoritma



```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - Tucll_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const[])
901     if(evaluate(value[3],evaluate(value[1],value[2],operation[j]),value[0],operation[k]),operation[i])-hasil == 0)
902     {
903         count++;
904         if(output == 1)
905         {
906             cout << "(" << value[3] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")"
907             << operation[k] << value[0] << endl;
908         }
909         else if(output == 2)
910         {
911             myFile << "(" << value[3] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")"
912             << operation[k] << value[0] << endl;
913         }
914     }
915     if(evaluate(evaluate(value[3],value[1],operation[i]),evaluate(value[2],value[0],operation[k]),operation[j])-hasil == 0)
916     {
917         count++;
918         if(output == 1)
919         {
920             cout << "(" << value[3] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2]
921             << operation[k] << value[0] << ")" << endl;
922         }
923         else if(output == 2)
924         {
925             myFile << "(" << value[3] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2]
926             << operation[k] << value[0] << ")" << endl;
927         }
928     }
929 }
930
931     if(evaluate(value[3],evaluate(evaluate(value[1],value[2],operation[j]),value[0],operation[k]),operation[i])-24 == 0)
932     {
933         count++;
934         if(output == 1)
935         {
936             cout << value[3] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")"
937             << operation[k] << value[0] << ")" << endl;
938         }
939         else if(output == 2)
940         {
941             myFile << value[3] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")"
942             << operation[k] << value[0] << ")" << endl;
943         }
944     }
945     if(evaluate(value[3],evaluate(value[1],evaluate(value[2],value[0],operation[k]),operation[j]),operation[i])-24 == 0)
946     {
947         count++;
948         if(output == 1)
949         {
950             cout << value[3] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2]
951             << operation[k] << value[0] << ")" << endl;
952         }
953         else if(output == 2)
954         {
955             myFile << value[3] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2]
956             << operation[k] << value[0] << ")" << endl;
957         }
958     }
959 }
960
Ln 520, Col 30  Spaces:4  UTF-8  CRLF  C++  Win32  11:42  25/01/2023
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - Tucll_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const[])
931     if(evaluate(value[3],evaluate(evaluate(value[1],value[2],operation[j]),value[0],operation[k]),operation[i])-24 == 0)
932     {
933         count++;
934         if(output == 1)
935         {
936             cout << value[3] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")"
937             << operation[k] << value[0] << ")" << endl;
938         }
939         else if(output == 2)
940         {
941             myFile << value[3] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")"
942             << operation[k] << value[0] << ")" << endl;
943         }
944     }
945     if(evaluate(value[3],evaluate(value[1],evaluate(value[2],value[0],operation[k]),operation[j]),operation[i])-24 == 0)
946     {
947         count++;
948         if(output == 1)
949         {
950             cout << value[3] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2]
951             << operation[k] << value[0] << ")" << endl;
952         }
953         else if(output == 2)
954         {
955             myFile << value[3] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2]
956             << operation[k] << value[0] << ")" << endl;
957         }
958     }
959 }
960
Ln 520, Col 30  Spaces:4  UTF-8  CRLF  C++  Win32  11:42  25/01/2023
```

IF2211 Strategi Algoritma

```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const*[])
961 //Permutasi 22
962 if(evaluate(evaluate(evaluate(value[3],value[1],operation[i]),value[0],operation[j]),value[2],operation[k])-hasil == 0)
963 {
964     count++;
965     if(output == 1)
966     {
967         cout << "(" << value[3] << operation[i] << value[1] << ")" << operation[j] << value[0] << ")";
968         << operation[k] << value[2] << endl;
969     }
970     else if(output == 2)
971     {
972         myFile << "(" << value[3] << operation[i] << value[1] << ")" << operation[j] << value[0] << ")";
973         << operation[k] << value[2] << endl;
974     }
975 }
976 if(evaluate(evaluate(value[3],evaluate(value[1],value[0],operation[j]),operation[i]),value[2],operation[k])-hasil==0)
977 {
978     count++;
979     if(output == 1)
980     {
981         cout << "(" << value[3] << operation[i] << "(" << value[1] << operation[j] << value[0] << ")" <<
982         << operation[k] << value[2] << endl;
983     }
984     else if(output == 2)
985     {
986         myFile << "(" << value[3] << operation[i] << "(" << value[1] << operation[j] << value[0] << ")" <<
987         << operation[k] << value[2] << endl;
988     }
989 }
```

IF2211 Strategi Algoritma

```
24GameSolver.cpp // Top Instance
src > 24GameSolver.cpp > main(int, char const *[])
991 }
992 if(evaluate(evaluate(value[3],value[1],operation[i]),evaluate(value[0],value[2],operation[k]),operation[j])-hasil == 0)
993 {
994     count++;
995     if(output == 1)
996     {
997         cout << "(" << value[3] << operation[i] << value[1] << ")" << operation[j] << "(" << value[0]
998             << operation[k] << value[2] << ")" << endl;
999     }
1000 else if(output == 2)
1001 {
1002     myFile << "(" << value[3] << operation[i] << value[1] << ")" << operation[j] << "(" << value[0]
1003             << operation[k] << value[2] << ")" << endl;
1004 }
1005 }
1006 if(evaluate(value[3],evaluate(evaluate(value[1],value[0],operation[j]),value[2],operation[k]),operation[i])-24 == 0)
1007 {
1008     count++;
1009     if(output == 1)
1010     {
1011         cout << value[3] << operation[i] << "(" << value[1] << operation[j] << value[0] << ")"
1012             << operation[k] << value[2] << ")" << endl;
1013     }
1014 else if(output == 2)
1015 {
1016     myFile << value[3] << operation[i] << "(" << value[1] << operation[3] << value[0] << ")"
1017             << operation[k] << value[2] << ")" << endl;
1018 }
1019 }
1020
// Bottom Instance
1641 }
1642 if(evaluate(value[3],evaluate(value[1],evaluate(value[0],value[2],operation[k]),operation[j]),operation[i])-24 == 0)
1643 {
1644     count++;
1645     if(output == 1)
1646     {
1647         cout << value[3] << operation[i] << "(" << value[1] << operation[j] << "(" << value[0]
1648             << operation[k] << value[2] << ")" ) << endl;
1649     }
1650 else if(output == 2)
1651 {
1652     myFile << value[3] << operation[i] << "(" << value[1] << operation[j] << "(" << value[0]
1653             << operation[k] << value[2] << ")" ) << endl;
1654 }
1655 }
1656
// Permutasi 23
1657 if(evaluate(evaluate(value[3],value[2],operation[i]),value[1],operation[j]),value[0],operation[k])-hasil == 0)
1658 {
1659     count++;
1660     if(output == 1)
1661     {
1662         cout << "(" << value[3] << operation[1] << value[2] << ")" << operation[j] << value[1] << ")"
1663             << operation[k] << value[0] << endl;
1664     }
1665 else if(output == 2)
1666 {
1667     myFile << "(" << value[3] << operation[i] << value[2] << ")" << operation[j] << value[1] << ")"
1668             << operation[k] << value[0] << endl;
1669 }
```

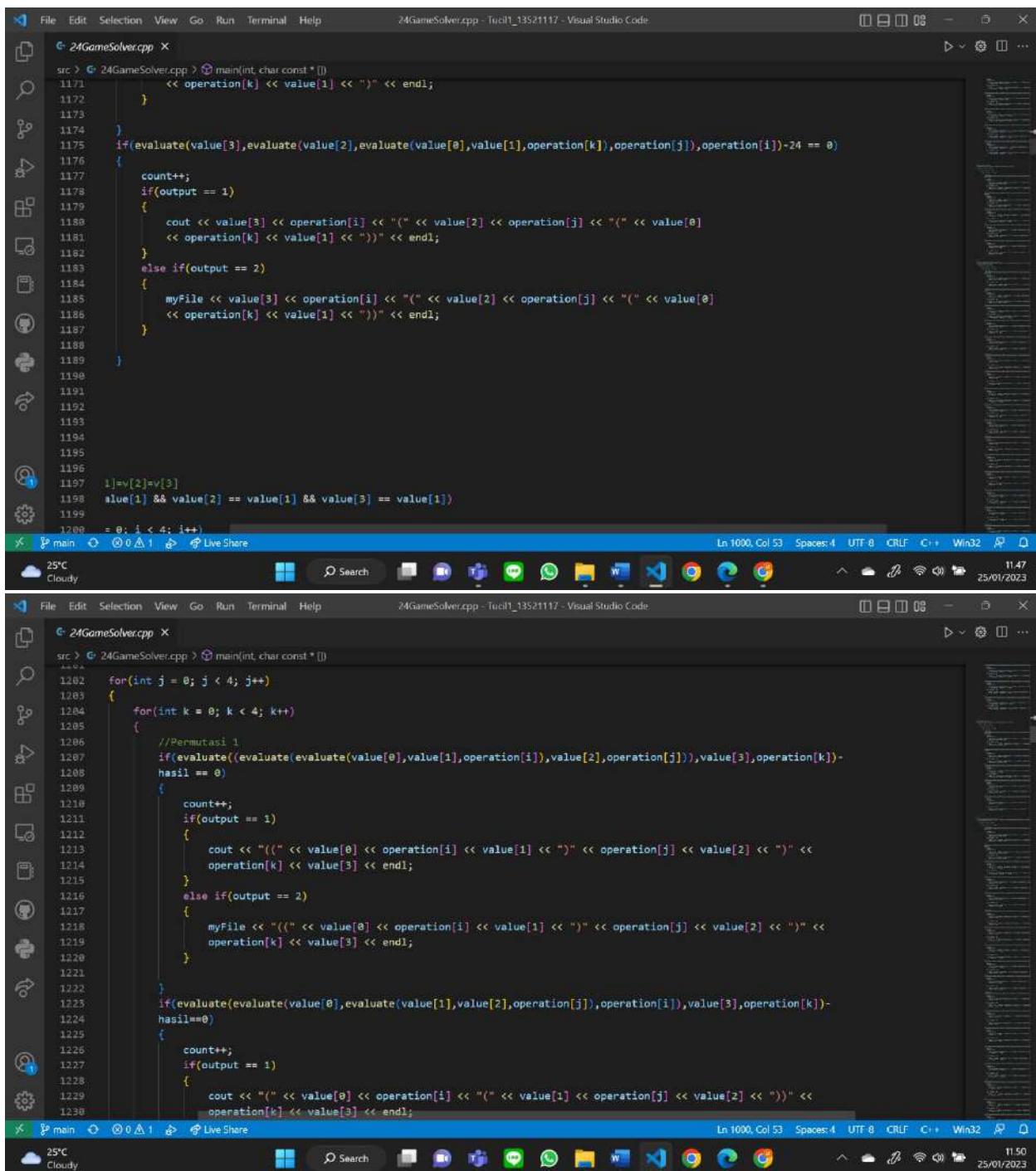
IF2211 Strategi Algoritma

```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const *[])
1052
1053
1054
1055     if(evaluate(evaluate(value[3],evaluate(value[2],value[1],operation[j]),operation[i]),value[0],operation[k])-hasil==0)
1056    {
1057        count++;
1058        if(output == 1)
1059        {
1060            cout << "(" << value[3] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" <<
1061            << operation[k] << value[0] << endl;
1062        }
1063        else if(output == 2)
1064        {
1065            myFile << "(" << value[3] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" <<
1066            << operation[k] << value[0] << endl;
1067        }
1068
1069    }
1070    if(evaluate(evaluate(value[3],value[2],operation[i]),evaluate(value[1],value[0],operation[k]),operation[j])-hasil == 0)
1071    {
1072        count++;
1073        if(output == 1)
1074        {
1075            cout << "(" << value[3] << operation[i] << value[2] << ")" << operation[j] << "(" << value[1]
1076            << operation[k] << value[0] << ")" << endl;
1077        }
1078        else if(output == 2)
1079        {
1080            myFile << "(" << value[3] << operation[i] << value[2] << ")" << operation[j] << "(" << value[1]
1081            << operation[k] << value[0] << ")" << endl;
1082        }
1083
1084    }
1085    if(evaluate(value[3],evaluate(evaluate(value[2],value[1],operation[j]),value[0],operation[k]),operation[i])-24 == 0)
1086    {
1087        count++;
1088        if(output == 1)
1089        {
1090            cout << value[3] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" <<
1091            << operation[k] << value[0] << ")" << endl;
1092        }
1093        else if(output == 2)
1094        {
1095            myFile << value[3] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" <<
1096            << operation[k] << value[0] << ")" << endl;
1097        }
1098    }
1099    if(evaluate(value[3],evaluate(value[2],evaluate(value[1],value[0],operation[k]),operation[j]),operation[i])-24 == 0)
1100    {
1101        count++;
1102        if(output == 1)
1103        {
1104            cout << value[3] << operation[i] << "(" << value[2] << operation[j] << "(" << value[1]
1105            << operation[k] << value[0] << ")" << endl;
1106        }
1107        else if(output == 2)
1108        {
1109            myFile << value[3] << operation[i] << "(" << value[2] << operation[j] << "(" << value[1]
1110            << operation[k] << value[0] << ")" << endl;
1111
1112    }
1113
1114
1115
1116
1117
1118
```

IF2211 Strategi Algoritma

```
src > 24GameSolver.cpp > main(int, char const *[])
1111 }
1112
1113 }
1114 //Permutasi 24
1115 if(evaluate(evaluate(value[3],value[2],operation[i]),value[0],operation[j]),value[1],operation[k])-hasil == 0)
1116 {
1117     count++;
1118     if(output == 1)
1119     {
1120         cout << "(" << value[3] << operation[i] << value[2] << ")" << operation[j] << value[0] << ")"
1121         << operation[k] << value[1] << endl;
1122     }
1123     else if(output == 2)
1124     {
1125         myFile << "(" << value[3] << operation[i] << value[2] << ")" << operation[j] << value[0] << ")"
1126         << operation[k] << value[1] << endl;
1127     }
1128 }
1129
1130 if(evaluate(evaluate(value[3],evaluate(value[2],value[0],operation[j]),operation[i]),value[1],operation[k])-hasil==0)
1131 {
1132     count++;
1133     if(output == 1)
1134     {
1135         cout << "(" << value[3] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")"
1136         << operation[k] << value[1] << endl;
1137     }
1138     else if(output == 2)
1139     {
1140         myFile << "(" << value[3] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")"
1141         << operation[k] << value[1] << endl;
1142     }
1143 }
1144 if(evaluate(evaluate(value[3],value[2],operation[i]),evaluate(value[0],value[1],operation[k]),operation[j])-hasil == 0)
1145 {
1146     count++;
1147     if(output == 1)
1148     {
1149         cout << "(" << value[3] << operation[i] << value[2] << ")" << operation[j] << "(" << value[0]
1150         << operation[k] << value[1] << ")" << endl;
1151     }
1152     else if(output == 2)
1153     {
1154         myFile << "(" << value[3] << operation[i] << value[2] << ")" << operation[j] << "(" << value[0]
1155         << operation[k] << value[1] << ")" << endl;
1156     }
1157 }
1158
1159
1160 if(evaluate(value[3],evaluate(evaluate(value[2],value[0],operation[j]),value[1],operation[k]),operation[i])-24 == 0)
1161 {
1162     count++;
1163     if(output == 1)
1164     {
1165         cout << value[3] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")"
1166         << operation[k] << value[1] << ")" << endl;
1167     }
1168     else if(output == 2)
1169     {
1170         myFile << value[3] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")"
1171         << operation[k] << value[1] << ")" << endl;
1172     }
1173 }
```

IF2211 Strategi Algoritma



```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
1171     << operation[k] << value[1] << ")" << endl;
1172 }
1173 }
1174 }
1175 if(evaluate(value[3],evaluate(value[2],evaluate(value[0],value[1],operation[k]),operation[j]),operation[i])-24 == 0)
1176 {
1177     count++;
1178     if(output == 1)
1179     {
1180         cout << value[3] << operation[i] << "(" << value[2] << operation[j] << "(" << value[0]
1181         << operation[k] << value[1] << ")" << endl;
1182     }
1183 else if(output == 2)
1184 {
1185     myFile << value[3] << operation[i] << "(" << value[2] << operation[j] << "(" << value[0]
1186     << operation[k] << value[1] << ")" << endl;
1187 }
1188
1189 }
1190
1191
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1194
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1196
1197 i]=v[2]*v[3]
1198 value[1] && value[2] == value[1] && value[3] == value[1]
1199
1200 = 0; i < 4; i++)
1201
1202 for(int j = 0; j < 4; j++)
1203 {
1204     for(int k = 0; k < 4; k++)
1205     {
1206         //Permutasi 1
1207         if(evaluate(evaluate(value[0],value[1],operation[i]),value[2],operation[j]),value[3],operation[k])-24 == 0)
1208         {
1209             count++;
1210             if(output == 1)
1211             {
1212                 cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")"
1213                 << operation[k] << value[3] << endl;
1214             }
1215             else if(output == 2)
1216             {
1217                 myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")"
1218                 << operation[k] << value[3] << endl;
1219             }
1220         }
1221     }
1222     if(evaluate(value[0],evaluate(value[1],value[2],operation[j]),operation[i]),value[3],operation[k])-24 == 0)
1223     {
1224         count++;
1225         if(output == 1)
1226         {
1227             cout << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")"
1228             << operation[k] << value[3] << endl;
1229     }
1230 }
```

IF2211 Strategi Algoritma

```
src > 24GameSolver.cpp > main(int, char const*)
```

```
1231     }
1232     else if(output == 2)
1233     {
1234         myfile << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" <<
1235             operation[k] << value[3] << endl;
1236     }
1237 }
1238 if(evaluate(evaluate(value[0],value[1],operation[i]),evaluate(value[2],value[3],operation[k]),operation[j])-hasil == 0)
1239 {
1240     count++;
1241     if(output == 1)
1242     {
1243         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2] << operation[k]
1244             << value[3] << ")" << endl;
1245     }
1246     else if (output == 2)
1247     {
1248         myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2]
1249             << operation[k] << value[3] << ")" << endl;
1250     }
1251 }
1252 if(evaluate(value[0],evaluate(evaluate(value[1],value[2],operation[j]),value[3],operation[k]),operation[i])-hasil == 0)
1253 {
1254     count++;
1255     if(output == 1)
1256     {
1257         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" << operation[k] <<
1258             value[3] << ")" << endl;
1259     }
1260     else if(output == 2)
1261     {
1262         myfile << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" << operation[k] <<
1263             value[3] << ")" << endl;
1264     }
1265 }
1266 if(evaluate(value[0],evaluate(value[1],evaluate(value[2],value[3],operation[k]),operation[j]),operation[i])-hasil == 0)
1267 {
1268     count++;
1269     if(output == 1)
1270     {
1271         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2] << operation[k] <<
1272             value[3] << ")" << endl;
1273     }
1274     else if(output == 2)
1275     {
1276         myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2] << operation[k] <<
1277             value[3] << ")" << endl;
1278     }
1279 }
1280
1281
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1283
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1286
1287     ue[i] dan value[2] = value[3]
1288     ]==value[1] && value[2] == value[3] || (value[0]==value[2] && value[1] == value[3]) || (value[0]==value[3] && value[1] == value[2]))|
1289     0; i < 4; i++)
1290 }
```

IF2211 Strategi Algoritma

```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TucilI_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *)
1291 j = 0; j < 4; j++)
1292
1293 int k = 0; k < 4; k++)
1294
1295 //Permutasi 1
1296 if(evaluate(evaluate(value[0],value[1],operation[i]),value[2],operation[j]),value[3],operation[k])-hasil == 0)
1297 {
1298     count++;
1299     if(output == 1)
1300     {
1301         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")" <<
1302             operation[k] << value[3] << endl;
1303     }
1304     else if(output == 2)
1305     {
1306         myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")" <<
1307             operation[k] << value[3] << endl;
1308     }
1309 }
1310
1311 if(evaluate(evaluate(value[0],evaluate(value[1],value[2],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
1312 {
1313     count++;
1314     if(output == 1)
1315     {
1316         cout << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" <<
1317             operation[k] << value[3] << endl;
1318     }
1319 }
1320
1321 else if(output == 2)
1322 {
1323     myFile << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" <<
1324             operation[k] << value[3] << endl;
1325 }
1326
1327 if(evaluate(evaluate(value[0],value[1],operation[i]),evaluate(value[2],value[3],operation[k]),operation[j])-hasil == 0)
1328 {
1329     count++;
1330     if(output == 1)
1331     {
1332         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2] << operation[k]
1333             << value[3] << ")" << endl;
1334     }
1335     else if (output == 2)
1336     {
1337         myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2]
1338             << operation[k] << value[3] << ")" << endl;
1339     }
1340 }
1341 if(evaluate(evaluate(value[0],evaluate(evaluate(value[1],value[2],operation[j]),value[3],operation[k]),operation[i])-hasil == 0)
1342 {
1343     count++;
1344     if(output == 1)
1345     {
1346         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" << operation[k] <<
1347             value[3] << ")" << endl;
1348     }
1349     else if(output == 2)
1350     {
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25/01/2023 11:50
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TucilI_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *)
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14110, Col 53 Spaces:4 UTF-8 CRLF C++ Win32
25/01/2023 11:51
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TucilI_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *)
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13810, Col 53 Spaces:4 UTF-8 CRLF C++ Win32
25/01/2023 11:51
```

IF2211 Strategi Algoritma

```
src > 24GameSolver.cpp > main(int, char const*)
```

```
1351     myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" << operation[k] << value[3] << ")" << endl;
```

```
1352 }
```

```
1353 }
```

```
1354 }
```

```
1355 }
```

```
1356 if(evaluate(value[0],evaluate(value[1],evaluate(value[2],value[3],operation[k]),operation[j]),operation[i])-hasil == 0)
```

```
1357 {
```

```
1358     count++;
```

```
1359     if(output == 1)
```

```
1360     {
```

```
1361         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2] << operation[k] << value[3] << ")" << endl;
```

```
1362     }
```

```
1363 }
```

```
1364 else if(output == 2)
```

```
1365 {
```

```
1366     cout << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2] << operation[k] << value[3] << ")" << endl;
```

```
1367 }
```

```
1368 }
```

```
1369 }
```

```
1370 }
```

```
//Permutasi 3
```

```
1373 if(evaluate(evaluate(value[0],value[2],operation[i]),value[1],operation[j]),value[3],operation[k])-hasil == 0)
```

```
1374 {
```

```
1375     count++;
```

```
1376     if(output == 1)
```

```
1377     {
```

```
1378         cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[1] << ")" << operation[k] << value[3] << endl;
```

```
1379     }
```

```
1380 }
```

```
1381 }
```

```
1382 else if(output == 2)
```

```
1383 {
```

```
1384     myFile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[1] << ")" << operation[k] << value[3] << endl;
```

```
1385 }
```

```
1386 }
```

```
1387 }
```

```
1388 if(evaluate(evaluate(value[0],evaluate(value[2],value[1],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
```

```
1389 {
```

```
1390     count++;
```

```
1391     if(output == 1)
```

```
1392     {
```

```
1393         cout << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k] << value[3] << endl;
```

```
1394     }
```

```
1395 }
```

```
1396 else if(output == 2)
```

```
1397 {
```

```
1398     myFile << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k] << value[3] << endl;
```

```
1399 }
```

```
1400 }
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```
1401 }
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```
1402 }
```

```
1403 if(evaluate(evaluate(value[0],value[2],operation[i]),evaluate(value[1],value[3],operation[k]),operation[j])-hasil == 0)
```

```
1404 {
```

```
1405     count++;
```

```
1406     if(output == 1)
```

```
1407     {
```

```
1408         cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[1] << operation[k] << value[3] << ")" << endl;
```

```
1409     }
```

```
1410 }
```

```
1411 }
```

```
1412 }
```

```
1413 }
```

```
1414 }
```

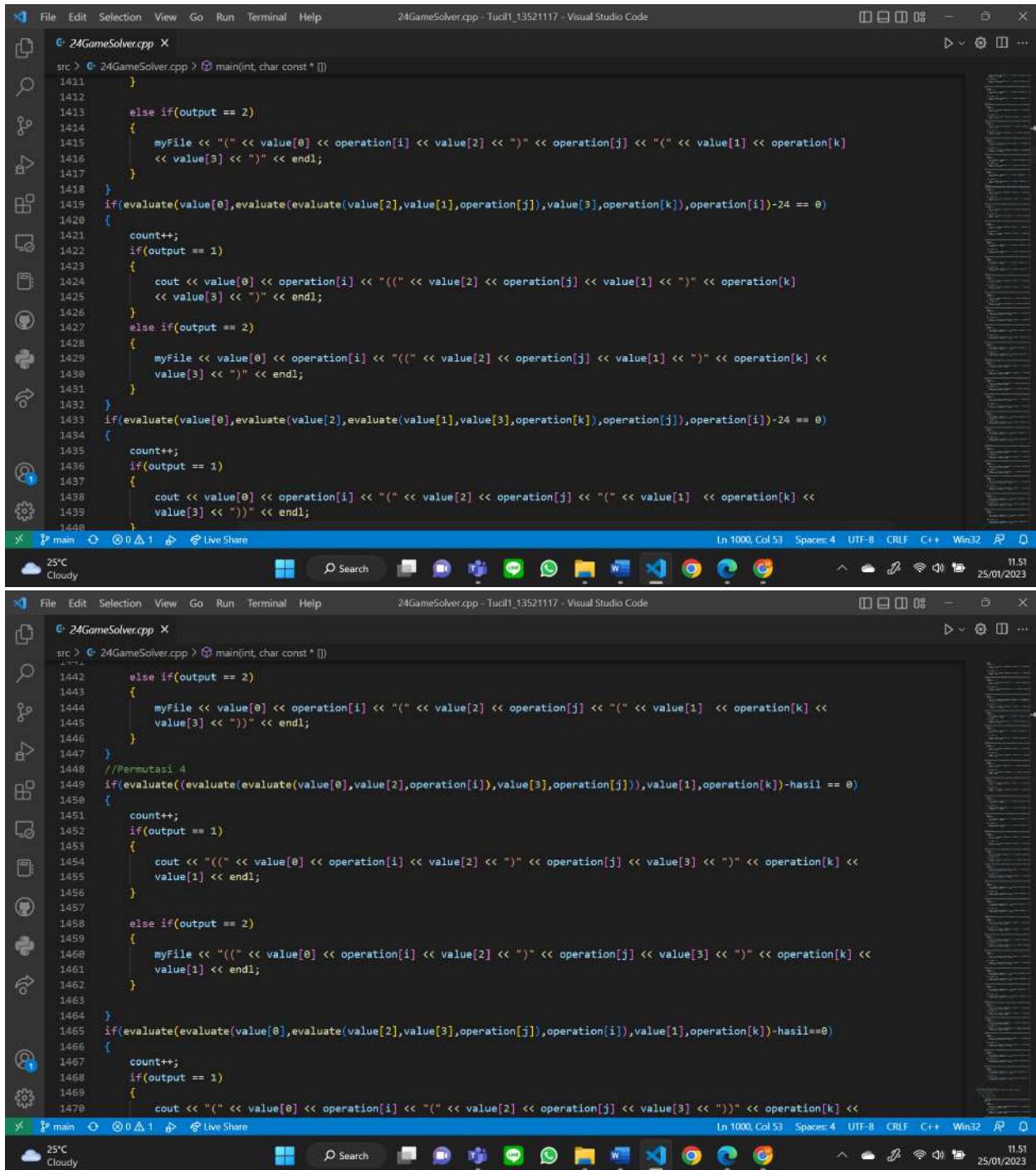
```
1415 }
```

```
1416 }
```

```
1417 }
```

```
1418 }
```

IF2211 Strategi Algoritma

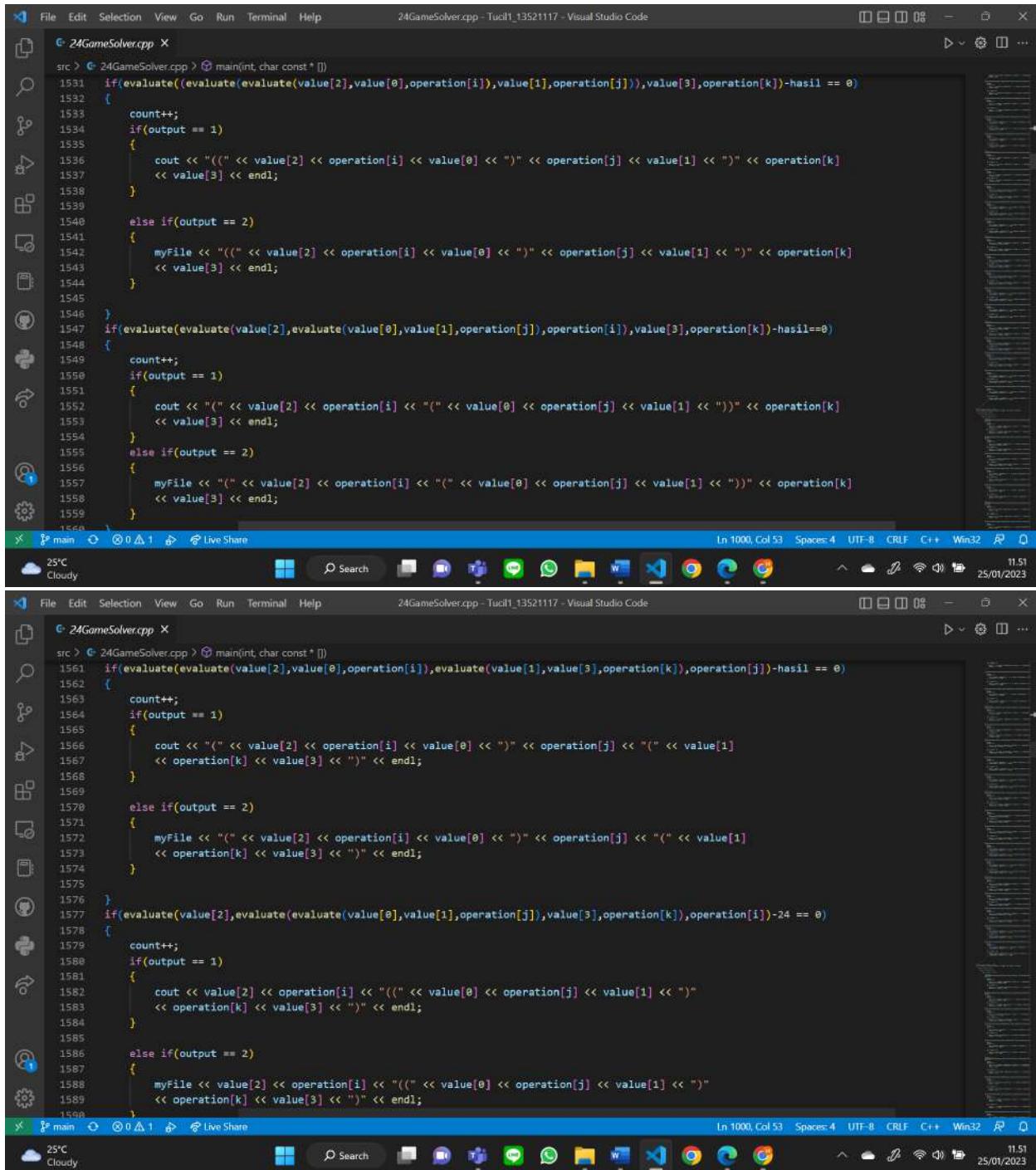


```
src > 24GameSolver.cpp > main(int, char const **)
1411     }
1412
1413     else if(output == 2)
1414     {
1415         myFile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[1] << operation[k]
1416         << value[3] << ")" << endl;
1417     }
1418 }
1419 if(evaluate(value[0],evaluate(evaluate(value[2],value[1],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
1420 {
1421     count++;
1422     if(output == 1)
1423     {
1424         cout << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k]
1425         << value[3] << ")" << endl;
1426     }
1427     else if(output == 2)
1428     {
1429         myFile << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k] <<
1430         value[3] << ")" << endl;
1431     }
1432 }
1433 if(evaluate(value[0],evaluate(value[2],evaluate(value[1],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
1434 {
1435     count++;
1436     if(output == 1)
1437     {
1438         cout << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[1] << operation[k] <<
1439         value[3] << ")" << endl;
1440     }
1441
1442     else if(output == 2)
1443     {
1444         myFile << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[1] << operation[k] <<
1445         value[3] << ")" << endl;
1446     }
1447 }
1448 //Permutasi 4
1449 if(evaluate(evaluate(value[0],value[2],operation[i]),value[3],operation[j]),value[1],operation[k])-hasil == 0)
1450 {
1451     count++;
1452     if(output == 1)
1453     {
1454         cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[3] << ")" << operation[k] <<
1455         value[1] << endl;
1456     }
1457     else if(output == 2)
1458     {
1459         myFile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[3] << ")" << operation[k] <<
1460         value[1] << endl;
1461     }
1462 }
1463
1464 }
1465 if(evaluate(evaluate(value[0],evaluate(value[2],value[3],operation[j]),operation[i]),value[1],operation[k])-hasil==0)
1466 {
1467     count++;
1468     if(output == 1)
1469     {
1470         cout << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k] <<
```

IF2211 Strategi Algoritma

```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
1471     value[1] << endl;
1472 }
1473
1474 else_if(output == 2)
1475 {
1476     myFile << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k] <<
1477     value[1] << endl;
1478 }
1479
1480 }
1481 if(evaluate(evaluate(value[0],value[2],operation[i]),evaluate(value[3],value[1],operation[k]),operation[j])-hasil == 0)
1482 {
1483     count++;
1484     if(output == 1)
1485     {
1486         cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[3] << operation[k] <<
1487         value[1] << ")" << endl;
1488 }
1489
1490 else_if(output == 2)
1491 {
1492     myFile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[3] << operation[k] <<
1493     value[1] << ")" << endl;
1494 }
1495
1496 }
1497
1498 if(evaluate(value[0],evaluate(evaluate(value[2],value[3],operation[i]),value[1],operation[k]),operation[i])-24 == 0)
1499 {
1500     count++;
1501     if(output == 1)
1502     {
1503         cout << value[0] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k]
1504         << value[1] << ")" << endl;
1505 }
1506
1507 else_if(output == 2)
1508 {
1509     myFile << value[0] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k]
1510         << value[1] << ")" << endl;
1511 }
1512
1513 }
1514 if(evaluate(value[0],evaluate(value[2],evaluate(value[3],value[1],operation[k]),operation[j]),operation[i])-24 == 0)
1515 {
1516     count++;
1517     if(output == 1)
1518     {
1519         cout << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[3] << operation[k]
1520         << value[1] << ")" << endl;
1521 }
1522
1523 else_if(output == 2)
1524 {
1525     myFile << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[3] << operation[k]
1526         << value[1] << ")" << endl;
1527 }
1528
1529 }
1530 //Permutasi 13
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
1501     if(output == 1)
1502     {
1503         cout << value[0] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k]
1504         << value[1] << ")" << endl;
1505 }
1506
1507 else_if(output == 2)
1508 {
1509     myFile << value[0] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k]
1510         << value[1] << ")" << endl;
1511 }
1512
1513 }
1514 if(evaluate(value[0],evaluate(value[2],evaluate(value[3],value[1],operation[k]),operation[j]),operation[i])-24 == 0)
1515 {
1516     count++;
1517     if(output == 1)
1518     {
1519         cout << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[3] << operation[k]
1520         << value[1] << ")" << endl;
1521 }
1522
1523 else_if(output == 2)
1524 {
1525     myFile << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[3] << operation[k]
1526         << value[1] << ")" << endl;
1527 }
1528
1529 }
1530 //Permutasi 13
```

IF2211 Strategi Algoritma



```
src > 24GameSolver.cpp > main(int, char const*) []
1531 if(evaluate(evaluate(value[2],value[0],operation[i]),value[1],operation[j]),value[3],operation[k])-hasil == 0)
1532 {
1533     count++;
1534     if(output == 1)
1535     {
1536         cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << value[1] << ")" << operation[k]
1537         << value[3] << endl;
1538     }
1539     else if(output == 2)
1540     {
1541         myFile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << value[1] << ")" << operation[k]
1542         << value[3] << endl;
1543     }
1544 }
1545
1546 }
1547 if(evaluate(evaluate(value[2],evaluate(value[0],value[1],operation[j]),value[3],operation[k])-hasil==0)
1548 {
1549     count++;
1550     if(output == 1)
1551     {
1552         cout << "(" << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")" << operation[k]
1553         << value[3] << endl;
1554     }
1555     else if(output == 2)
1556     {
1557         myFile << "(" << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")" << operation[k]
1558         << value[3] << endl;
1559     }
1560 }
```



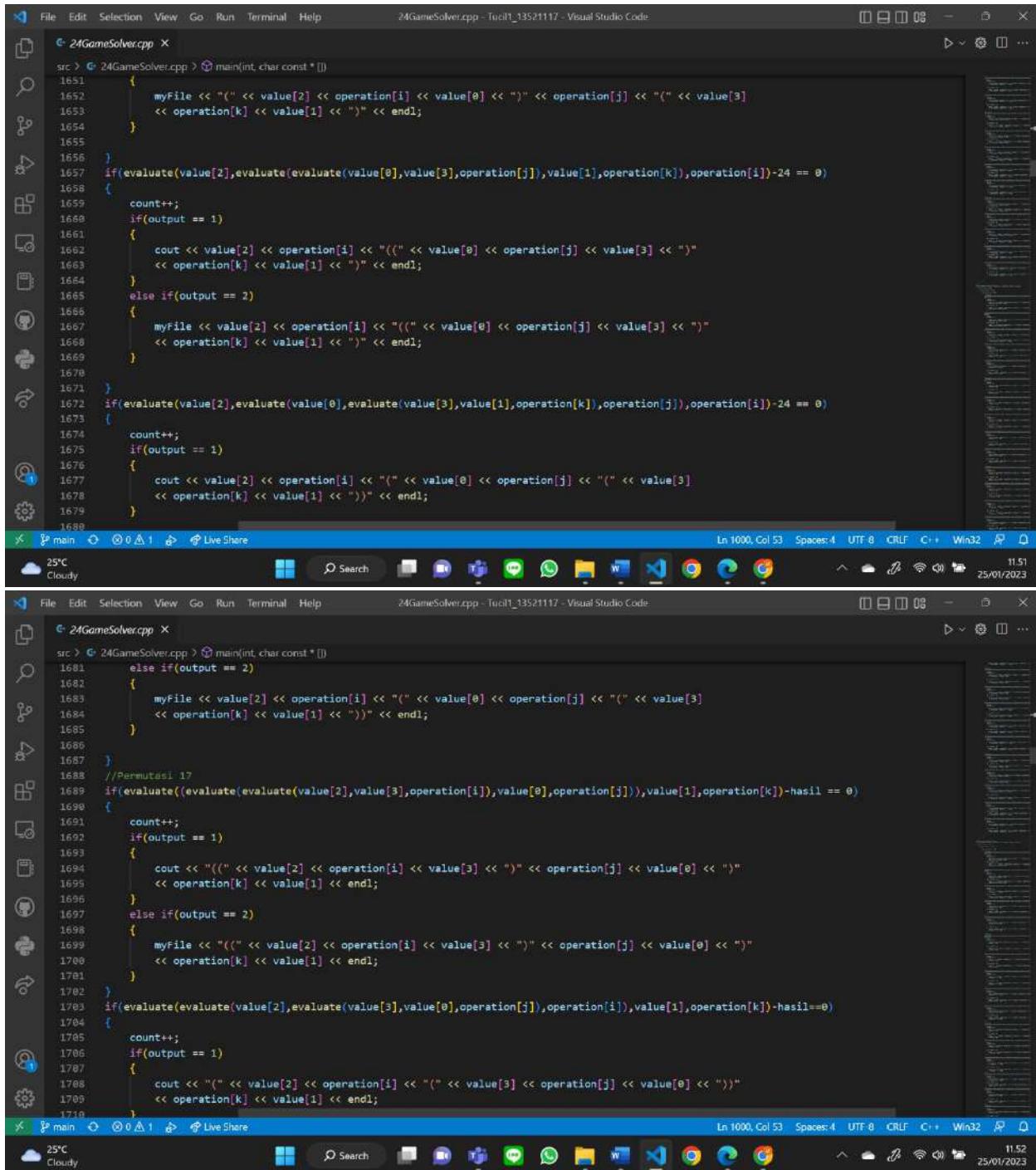
```
src > 24GameSolver.cpp > main(int, char const*) []
1561 if(evaluate(evaluate(value[2],value[0],operation[i]),evaluate(value[1],value[3],operation[k]),operation[j])-hasil == 0)
1562 {
1563     count++;
1564     if(output == 1)
1565     {
1566         cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[1]
1567         << operation[k] << value[3] << ")" << endl;
1568     }
1569     else if(output == 2)
1570     {
1571         myFile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[1]
1572         << operation[k] << value[3] << ")" << endl;
1573     }
1574 }
1575
1576 }
1577 if(evaluate(value[2],evaluate(evaluate(value[0],value[1],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
1578 {
1579     count++;
1580     if(output == 1)
1581     {
1582         cout << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
1583         << operation[k] << value[3] << ")" << endl;
1584     }
1585     else if(output == 2)
1586     {
1587         myFile << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
1588         << operation[k] << value[3] << ")" << endl;
1589     }
1590 }
```

IF2211 Strategi Algoritma

```
24GameSolver.cpp // Tucil1_13521117 - Visual Studio Code
File Edit Selection View Go Run Terminal Help
src > 24GameSolver.cpp > main(int, char const *[])
1592 }
1593 if(evaluate(value[2],evaluate(value[0],evaluate(value[1],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
1594 {
1595     count++;
1596     if(output == 1)
1597     {
1598         cout << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[1]
1599             << operation[k] << value[3] << ")");
1600         << endl;
1601     }
1602     else if(output == 2)
1603     {
1604         myFile << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[1]
1605             << operation[k] << value[3] << ")");
1606         << endl;
1607     }
1608 }
1609 //Permutasi 14
1610 if(evaluate(evaluate(value[2],value[0],operation[i]),value[3],operation[j]),value[1],operation[k])-hasil == 0)
1611 {
1612     count++;
1613     if(output == 1)
1614     {
1615         cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << value[3] << ")"
1616             << operation[k] << value[1] << endl;
1617     }
1618     else if(output == 2)
1619     {
1620     }
1621     myFile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << value[3] << ")"
1622             << operation[k] << value[1] << endl;
1623     }
1624 }
1625 }
1626 if(evaluate(evaluate(value[2],evaluate(value[0],value[3],operation[j]),operation[i]),value[1],operation[k])-hasil==0)
1627 {
1628     count++;
1629     if(output == 1)
1630     {
1631         cout << "(" << value[2] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")"
1632             << operation[k] << value[1] << endl;
1633     }
1634     else if(output == 2)
1635     {
1636         myFile << "(" << value[2] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")"
1637             << operation[k] << value[1] << endl;
1638     }
1639 }
1640 }
1641 if(evaluate(evaluate(value[2],value[0],operation[i]),evaluate(value[3],value[1],operation[k]),operation[j])-hasil == 0)
1642 {
1643     count++;
1644     if(output == 1)
1645     {
1646         cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[3]
1647             << operation[k] << value[1] << ")" << endl;
1648     }
1649 }
1650 }
1651 else if(output == 2)
1652 {
1653     myFile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[3]
1654             << operation[k] << value[1] << ")" << endl;
1655 }
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1797 }
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1799 }
```

```
24GameSolver.cpp // Tucil1_13521117 - Visual Studio Code
File Edit Selection View Go Run Terminal Help
src > 24GameSolver.cpp > main(int, char const *[])
1621     myFile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << value[3] << ")"
1622         << operation[k] << value[1] << endl;
1623     }
1624 }
1625 }
1626 if(evaluate(evaluate(value[2],evaluate(value[0],value[3],operation[j]),operation[i]),value[1],operation[k])-hasil==0)
1627 {
1628     count++;
1629     if(output == 1)
1630     {
1631         cout << "(" << value[2] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")"
1632             << operation[k] << value[1] << endl;
1633     }
1634     else if(output == 2)
1635     {
1636         myFile << "(" << value[2] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")"
1637             << operation[k] << value[1] << endl;
1638     }
1639 }
1640 }
1641 if(evaluate(evaluate(value[2],value[0],operation[i]),evaluate(value[3],value[1],operation[k]),operation[j])-hasil == 0)
1642 {
1643     count++;
1644     if(output == 1)
1645     {
1646         cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[3]
1647             << operation[k] << value[1] << ")" << endl;
1648     }
1649 }
1650 }
1651 else if(output == 2)
1652 {
1653     myFile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[3]
1654             << operation[k] << value[1] << ")" << endl;
1655 }
1656 }
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1744 }
1745 }
1746 }
1747 }
1748 }
1749 }
1749 }
```

IF2211 Strategi Algoritma



```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const *[])
1651     {
1652         myFile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[3]
1653         << operation[k] << value[1] << ")" << endl;
1654     }
1655
1656 }
1657 if(evaluate(value[2],evaluate(evaluate(value[0],value[3],operation[j]),value[1],operation[k]),operation[i])-24 == 0)
1658 {
1659     count++;
1660     if(output == 1)
1661     {
1662         cout << value[2] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")"
1663         << operation[k] << value[1] << ")" << endl;
1664     }
1665     else_if(output == 2)
1666     {
1667         myFile << value[2] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")"
1668         << operation[k] << value[1] << ")" << endl;
1669     }
1670 }
1671 if(evaluate(value[2],evaluate(value[0],evaluate(value[3],value[1],operation[k]),operation[j]),operation[i])-24 == 0)
1672 {
1673     count++;
1674     if(output == 1)
1675     {
1676         cout << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[3]
1677         << operation[k] << value[1] << ")" << endl;
1678     }
1679 }
1680
1681 else_if(output == 2)
1682 {
1683     myFile << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[3]
1684         << operation[k] << value[1] << ")" << endl;
1685 }
1686
1687 }
1688 //Permutasi 17
1689 if(evaluate(evaluate(value[2],value[3],operation[i]),value[0],operation[j]),value[1],operation[k])-hasil == 0)
1690 {
1691     count++;
1692     if(output == 1)
1693     {
1694         cout << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << value[0] << ")"
1695         << operation[k] << value[1] << endl;
1696     }
1697     else_if(output == 2)
1698     {
1699         myFile << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << value[0] << ")"
1700         << operation[k] << value[1] << endl;
1701     }
1702 }
1703 if(evaluate(evaluate(value[2],evaluate(value[3],value[0],operation[j]),operation[i]),value[1],operation[k])-hasil==0)
1704 {
1705     count++;
1706     if(output == 1)
1707     {
1708         cout << "(" << value[2] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")"
1709         << operation[k] << value[1] << endl;
1710 }
```

IF2211 Strategi Algoritma

```
src > 24GameSolver.cpp > main(int, char const *[])
1711     else if(output == 2)
1712     {
1713         myFile << "(" << value[2] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")"
1714         << operation[k] << value[1] << endl;
1715     }
1716 }
1717 if(evaluate(evaluate(value[2],value[3],operation[i]),evaluate(value[0],value[1],operation[k]),operation[j])-hasil == 0)
1718 {
1719     count++;
1720     if(output == 1)
1721     {
1722         cout << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << "(" << value[0]
1723         << operation[k] << value[1] << ")" << endl;
1724     }
1725
1726 else if(output == 2)
1727 {
1728     myFile << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << "(" << value[0]
1729     << operation[k] << value[1] << ")" << endl;
1730 }
1731
1732 }
1733 if(evaluate(value[2],evaluate(evaluate(value[3],value[0],operation[j]),value[1],operation[k]),operation[i])-24 == 0)
1734 {
1735     count++;
1736     if(output == 1)
1737     {
1738         cout << value[2] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")"
1739         << operation[k] << value[1] << ")" << endl;
1740     }
1741     else if(output == 2)
1742     {
1743         myFile << value[2] << operation[i] << "(" << value[3] << operation[j] << value[0] << "
1744         << operation[k] << value[1] << ")" << endl;
1745     }
1746
1747 }
1748 if(evaluate(value[2],evaluate(value[3],evaluate(value[0],value[1],operation[k]),operation[j]),operation[i])-24 == 0)
1749 {
1750     count++;
1751     if(output == 1)
1752     {
1753         cout << value[2] << operation[i] << "(" << value[3] << operation[j] << "(" << value[0]
1754         << operation[k] << value[1] << ")" << endl;
1755     }
1756
1757 else if(output == 2)
1758 {
1759     myFile << value[2] << operation[i] << "(" << value[3] << operation[j] << "(" << value[0]
1760         << operation[k] << value[1] << ")" << endl;
1761     }
1762
1763 }
1764
1765
1766
1767
1768
1769     value[0] == value[1]
1770 ] == value[1]) && (value[2] != value[0] && (value[3] != value[1]))
```

```

File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TucilI_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const*[])
1771
1772     i < 4; i++)
1773
1774     j = 0; j < 4; j++)
1775
1776     int k = 0; k < 4; k++)
1777
1778     //Permutasi 1
1779     if(evaluate(evaluate(value[0],value[1],operation[i]),value[2],operation[j]),value[3],operation[k])-hasil == 0)
1780     {
1781         count++;
1782         if(output == 1)
1783         {
1784             cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")" <<
1785             operation[k] << value[3] << endl;
1786         }
1787         else if(output == 2)
1788         {
1789             myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")" <<
1790             operation[k] << value[3] << endl;
1791         }
1792     }
1793
1794     if(evaluate(evaluate(value[0],evaluate(value[1],value[2],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
1795     {
1796         count++;
1797         if(output == 1)
1798     }
1799
20 main 0 1 Live Share Ln 1000, Col 53 Spaces:4 UTF-8 CRLF C++ Win32 11:52 25/01/2023
Cloudy
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TucilI_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const[])
1881     cout << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" ) <<
1882     operation[k] << value[3] << endl;
1883 }
1884 else if(output == 2)
1885 {
1886     myFile << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" ) <<
1887     operation[k] << value[3] << endl;
1888 }
1889
1890 if(evaluate(evaluate(value[0],value[1],operation[i]),evaluate(value[2],value[3],operation[k]),operation[j])-hasil == 0)
1891 {
1892     count++;
1893     if(output == 1)
1894     {
1895         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2] << operation[k]
1896         << value[3] << ")" << endl;
1897     }
1898     else if (output == 2)
1899     {
1900         myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2]
1901         << operation[k] << value[3] << ")" << endl;
1902     }
1903
1904 if(evaluate(value[0],evaluate(evaluate(value[1],value[2],operation[j]),value[3],operation[k]),operation[i])-hasil == 0)
1905 {
1906     count++;
1907     if(output == 1)
1908     {
1909         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" << operation[k] <<
1910         value[3] << ")" << endl;
1911
20 main 0 1 Live Share Ln 1000, Col 53 Spaces:4 UTF-8 CRLF C++ Win32 11:52 25/01/2023
Cloudy

```

IF2211 Strategi Algoritma

The image displays two side-by-side screenshots of the Visual Studio Code editor. Both screenshots show the same file, `24GameSolver.cpp`, which is a C++ program designed to solve the 24 game. The code implements a backtracking search to find a sequence of operations (addition, subtraction, multiplication, division) that result in the value 24 from four given numbers.

Top Screenshot (Incorrect Code):

```
src > 24GameSolver.cpp > main(int, char const *[])
1851     }
1852     else if(output == 2)
1853     {
1854         myfile << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" << operation[k] <<
1855         value[3] << endl;
1856     }
1857
1858     if(evaluate(value[0],evaluate(value[1],evaluate(value[2],value[3],operation[k]),operation[j]),operation[i])-hasil == 0)
1859     {
1860         count++;
1861         if(output == 1)
1862         {
1863             cout << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2] << operation[k] <<
1864             value[3] << ")" << endl;
1865         }
1866         else if(output == 2)
1867         {
1868             myfile << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2] << operation[k] <<
1869             value[3] << ")" << endl;
1870         }
1871         //Permutasi 2
1872         if(evaluate(evaluate(evaluate(value[0],value[1],operation[i]),value[3],operation[j]),value[2],operation[k])-hasil == 0)
1873         {
1874             count++;
1875             if(output == 1)
1876             {
1877                 cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[3] << ")" << operation[k] <<
1878                 value[2] << endl;
1879             }
1880             else if(output == 2)
1881             {
1882                 myfile << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << ")" << operation[k] <<
1883                 value[2] << endl;
1884             }
1885         }
1886     }
1887     if(evaluate(evaluate(value[0],evaluate(value[1],value[3],operation[j]),operation[i]),value[2],operation[k])-hasil==0)
1888     {
1889         if(evaluate(evaluate(value[0],value[1],operation[i]),evaluate(value[3],value[2],operation[k]),operation[j])-hasil == 0)
1890         {
1891             cout << "SOLVED" << endl;
1892         }
1893     }
1894 }
```

Bottom Screenshot (Corrected Code):

```
src > 24GameSolver.cpp > main(int, char const *[])
1861     }
1862     cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[3] << ")" << operation[k] <<
1863     value[2] << endl;
1864
1865     else if(output == 2)
1866     {
1867         myfile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[3] << ")" << operation[k] <<
1868         value[2] << endl;
1869     }
1870
1871     }
1872     if(evaluate(evaluate(value[0],evaluate(value[1],value[3],operation[j]),operation[i]),value[2],operation[k])-hasil==0)
1873     {
1874         count++;
1875         if(output == 1)
1876         {
1877             cout << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << ")" << operation[k] <<
1878             value[2] << endl;
1879         }
1880         else if(output == 2)
1881         {
1882             myfile << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << ")" << operation[k] <<
1883             value[2] << endl;
1884         }
1885     }
1886
1887     if(evaluate(evaluate(value[0],value[1],operation[i]),evaluate(value[3],value[2],operation[k]),operation[j])-hasil == 0)
1888     {
1889         if(evaluate(evaluate(value[0],value[1],operation[i]),evaluate(value[3],value[2],operation[k]),operation[j])-hasil == 0)
1890         {
1891             cout << "SOLVED" << endl;
1892         }
1893     }
1894 }
```

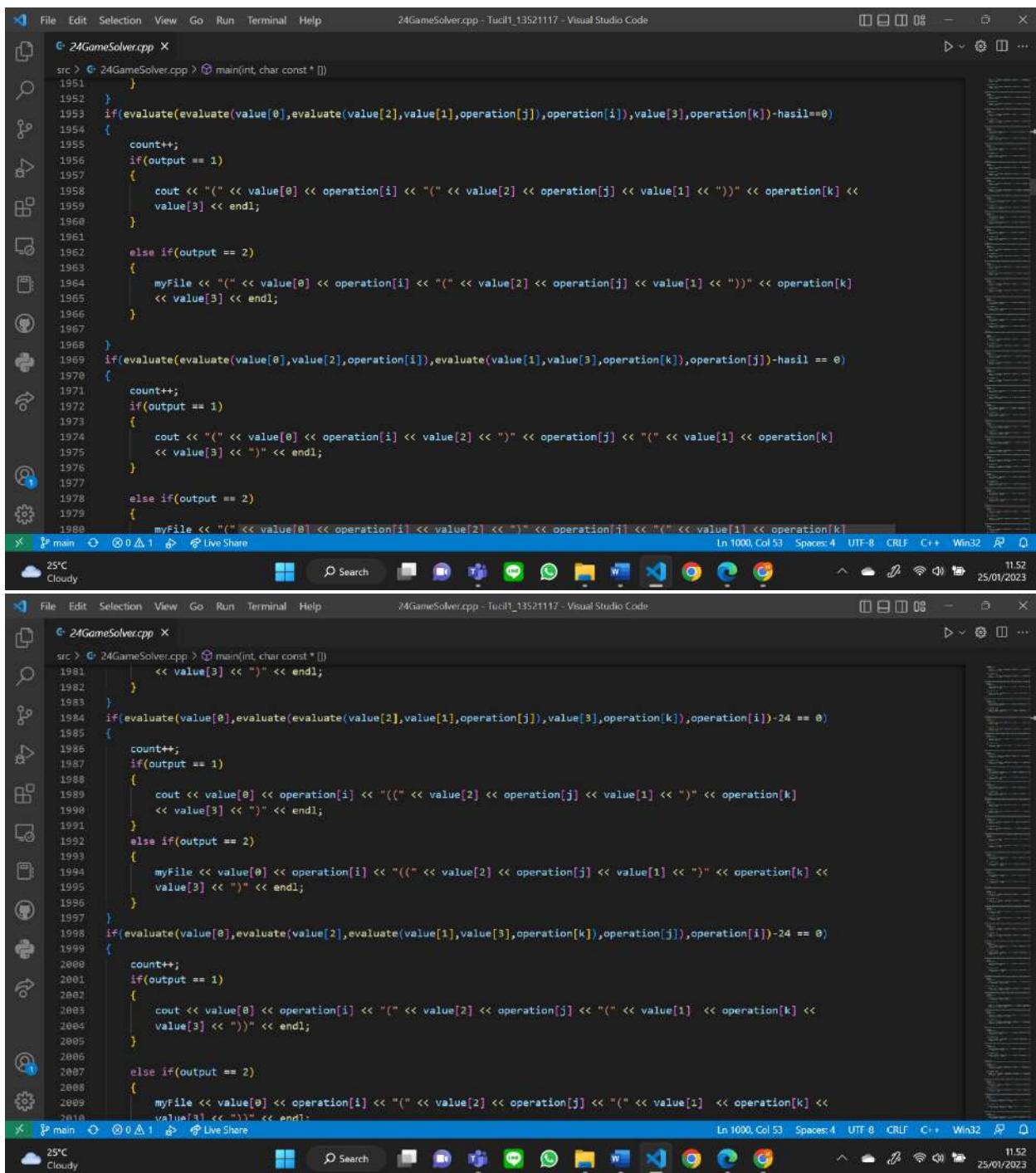
IF2211 Strategi Algoritma

```
src > 24GameSolver.cpp > main(int, char const *[])
1891     count++;
1892     if(output == 1)
1893     {
1894         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[3] << operation[k] <<
1895         value[2] << ")" << endl;
1896     }
1897
1898     else if(output == 2)
1899     {
1900         myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[3] << operation[k] <<
1901         value[2] << ")" << endl;
1902     }
1903
1904 }
1905 if(evaluate(value[0],evaluate(evaluate(value[1],value[3],operation[j]),value[2],operation[k]),operation[i])-24 == 0)
1906 {
1907     count++;
1908     if(output == 1)
1909     {
1910         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] <<
1911         value[2] << ")" << endl;
1912     }
1913
1914     else if(output == 2)
1915     {
1916         myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] <<
1917         value[2] << ")" << endl;
1918     }
1919 }
```



```
src > 24GameSolver.cpp > main(int, char const *[])
1921     if(evaluate(value[0],evaluate(value[1],evaluate(value[3],value[2],operation[k]),operation[j]),operation[i])-24 == 0)
1922     {
1923         count++;
1924         if(output == 1)
1925         {
1926             cout << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[3] << operation[k] <<
1927             value[2] << ")" << endl;
1928         }
1929
1930         else if(output == 2)
1931         {
1932             myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[3] << operation[k] <<
1933             value[2] << ")" << endl;
1934         }
1935     }
1936
1937 //Permutasi 3
1938 if(evaluate(evaluate(evaluate(value[0],value[2],operation[i]),value[1],operation[j]),value[3],operation[k])-hasil == 0)
1939 {
1940     count++;
1941     if(output == 1)
1942     {
1943         cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[1] << ")" << operation[k] <<
1944         value[3] << endl;
1945     }
1946
1947     else if(output == 2)
1948     {
1949         myFile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[1] << ")" << operation[k] <<
1950         value[3] << endl;
1951 }
```

IF2211 Strategi Algoritma



```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const*[])
1951     }
1952 }
1953 if(evaluate(evaluate(value[0],evaluate(value[2],value[1],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
1954 {
1955     count++;
1956     if(output == 1)
1957     {
1958         cout << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k] <<
1959         value[3] << endl;
1960     }
1961     else if(output == 2)
1962     {
1963         myFile << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k]
1964         << value[3] << endl;
1965     }
1966 }
1967
1968
1969 if(evaluate(evaluate(value[0],value[2],operation[i]),evaluate(value[1],value[3],operation[k]),operation[j])-hasil == 0)
1970 {
1971     count++;
1972     if(output == 1)
1973     {
1974         cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[1] << operation[k]
1975         << value[3] << ")" << endl;
1976     }
1977     else if(output == 2)
1978     {
1979         myFile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[1] << operation[k]
1980         << value[3] << ")" << endl;
1981     }
1982 }
1983
1984 if(evaluate(value[0],evaluate(evaluate(value[2],value[1],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
1985 {
1986     count++;
1987     if(output == 1)
1988     {
1989         cout << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k]
1990         << value[3] << ")" << endl;
1991     }
1992     else if(output == 2)
1993     {
1994         myFile << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k] <<
1995         value[3] << ")" << endl;
1996     }
1997 }
1998 if(evaluate(value[0],evaluate(value[2],evaluate(value[1],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
1999 {
2000     count++;
2001     if(output == 1)
2002     {
2003         cout << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[1] << operation[k] <<
2004         value[3] << ")" << endl;
2005     }
2006     else if(output == 2)
2007     {
2008         myFile << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[1] << operation[k] <<
2009         value[3] << ")" << endl;
2010 }
```

IF2211 Strategi Algoritma

```
2811     }
2812 }
2813 //Permutasi d
2814 if(evaluate(evaluate(value[0],value[2],operation[i]),value[3],operation[j]),value[1],operation[k])-hasil == 0)
2815 {
2816     count++;
2817     if(output == 1)
2818     {
2819         cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[3] << ")" << operation[k] <<
2820         value[1] << endl;
2821     }
2822
2823     else if(output == 2)
2824     {
2825         myFile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[3] << ")" << operation[k] <<
2826         value[1] << endl;
2827     }
2828
2829 }
2830 if(evaluate(evaluate(value[0],evaluate(value[2],value[3],operation[j]),operation[i]),value[1],operation[k])-hasil==0)
2831 {
2832     count++;
2833     if(output == 1)
2834     {
2835         cout << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" ) << operation[k] <<
2836         value[1] << endl;
2837     }
2838
2839     else if(output == 2)
2840     {
2841         myFile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[3] << ")" << operation[k] <<
2842         value[1] << endl;
2843     }
2844
2845 }
2846 if(evaluate(evaluate(value[0],value[2],operation[i]),evaluate(value[3],value[1],operation[k]),operation[j])-hasil == 0)
2847 [
2848     count++;
2849     if(output == 1)
2850     {
2851         cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[3] << operation[k] <<
2852         value[1] << ")" << endl;
2853     }
2854
2855     else if(output == 2)
2856     {
2857         myFile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[3] << operation[k] <<
2858         value[1] << ")" << endl;
2859     }
2860 ]
2861
2862 if(evaluate(value[0],evaluate(evaluate(value[2],value[3],operation[j]),value[1],operation[k]),operation[i])-24 == 0)
2863 [
2864     count++;
2865     if(output == 1)
2866     {
2867         cout << value[0] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k] <<
2868         value[1] << ")" << endl;
2869     }
2870 ]
```

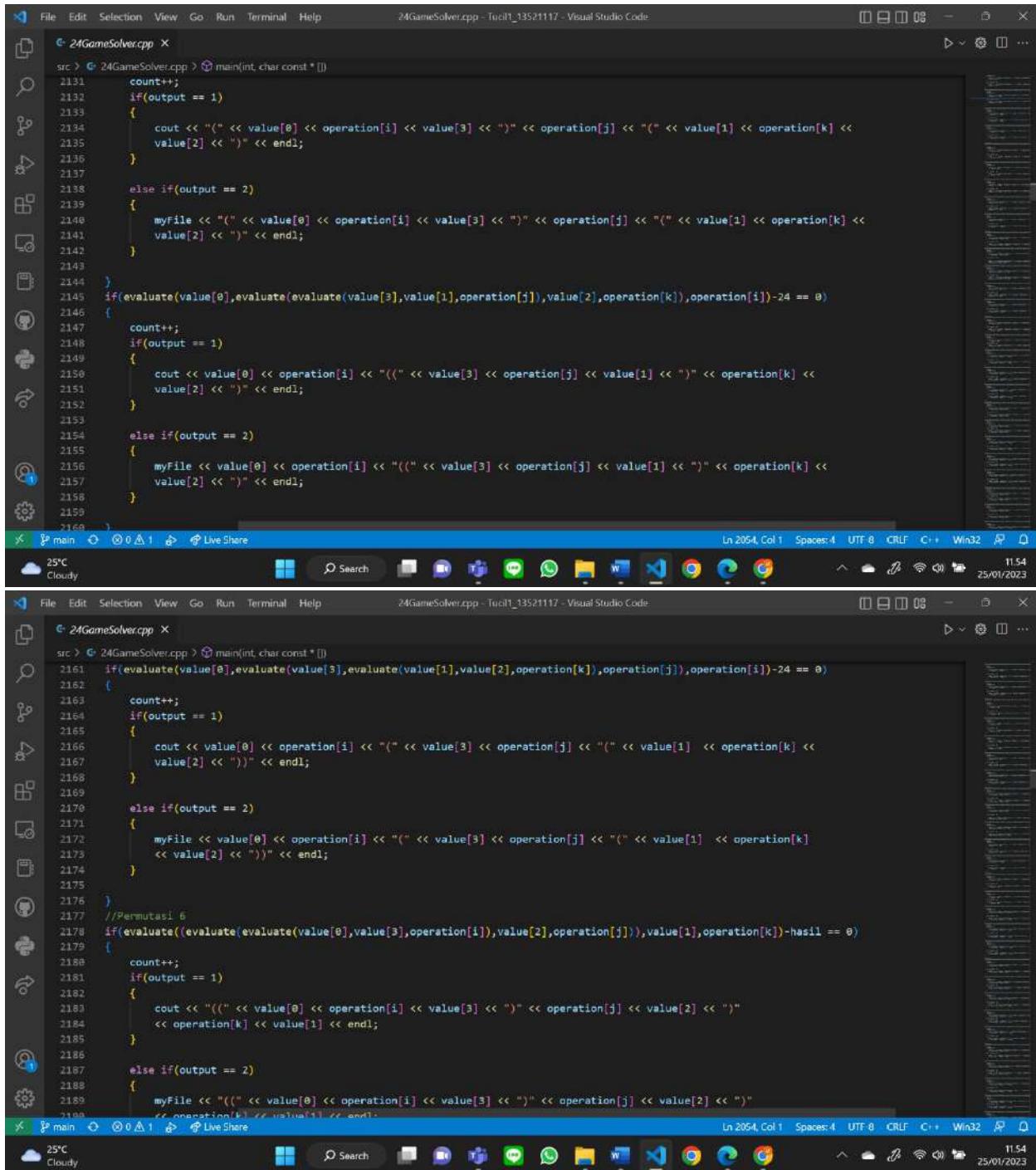
IF2211 Strategi Algoritma

```
2071     else if(output == 2)
2072     {
2073         myFile << value[0] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k]
2074         << value[1] << endl;
2075     }
2076
2077
2078 }
2079 if(evaluate(value[0],evaluate(value[2],evaluate(value[3],value[1],operation[k]),operation[j]),operation[i])-24 == 0)
2080 {
2081     count++;
2082     if(output == 1)
2083     {
2084         cout << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[3] << operation[k]
2085         << value[1] << ")" << endl;
2086     }
2087
2088     else if(output == 2)
2089     {
2090         myFile << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[3] << operation[k]
2091         << value[1] << ")" << endl;
2092     }
2093
2094 }
2095 //Permutasi 5
2096 if(evaluate(evaluate(evaluate(value[0],value[3],operation[i]),value[1],operation[j]),value[2],operation[k])-hasil == 0)
2097 {
2098     count++;
2099     if(output == 1)
2100         if(output == 1)
```



```
2101     {
2102         cout << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << value[1] << ")" << operation[k]
2103         << value[2] << endl;
2104     }
2105
2106     else if(output == 2)
2107     {
2108         myFile << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << value[1] << ")" << operation[k]
2109         << value[2] << endl;
2110     }
2111
2112 }
2113 if(evaluate(evaluate(value[0],evaluate(value[3],value[1],operation[j]),operation[i]),value[2],operation[k])-hasil==0)
2114 {
2115     count++;
2116     if(output == 1)
2117     {
2118         cout << "(" << value[0] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")" << operation[k]
2119         << value[2] << endl;
2120     }
2121
2122     else if(output == 2)
2123     {
2124         myFile << "(" << value[0] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")" << operation[k]
2125         << value[2] << endl;
2126     }
2127
2128 }
2129 if(evaluate(evaluate(value[0],value[3],operation[i]),evaluate(value[1],value[2],operation[k]),operation[j])-hasil == 0)
2130 [
```

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```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const *[])
2131     count++;
2132     if(output == 1)
2133     {
2134         cout << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << "(" << value[1] << operation[k] <<
2135         value[2] << ")" << endl;
2136     }
2137
2138     else if(output == 2)
2139     {
2140         myfile << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << "(" << value[1] << operation[k] <<
2141         value[2] << ")" << endl;
2142     }
2143
2144 }
2145 if(evaluate(value[0],evaluate(evaluate(value[3],value[1],operation[4]),value[2],operation[k]),operation[i])-24 == 0)
2146 {
2147     count++;
2148     if(output == 1)
2149     {
2150         cout << value[0] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")" << operation[k] <<
2151         value[2] << ")" << endl;
2152     }
2153
2154     else if(output == 2)
2155     {
2156         myfile << value[0] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")" << operation[k] <<
2157         value[2] << ")" << endl;
2158     }
2159 }
```



```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const *[])
2161     if(evaluate(value[0],evaluate(value[3],evaluate(value[1],value[2],operation[k]),operation[j]),operation[i])-24 == 0)
2162     {
2163         count++;
2164         if(output == 1)
2165         {
2166             cout << value[0] << operation[i] << "(" << value[3] << operation[j] << "(" << value[1] << operation[k] <<
2167             value[2] << ")" << endl;
2168         }
2169
2170         else if(output == 2)
2171         {
2172             myfile << value[0] << operation[i] << "(" << value[3] << operation[j] << "(" << value[1] << operation[k]
2173             << value[2] << ")" << endl;
2174         }
2175     }
2176
2177 //Permutasi 6
2178 if(evaluate(evaluate(evaluate(value[0],value[3],operation[i]),value[2],operation[j]),value[1],operation[k])-hasil == 0)
2179 {
2180     count++;
2181     if(output == 1)
2182     {
2183         cout << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << value[2] << ")"
2184         << operation[k] << value[1] << endl;
2185     }
2186
2187     else if(output == 2)
2188     {
2189         myfile << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << value[2] << ")"
2190         << operation[k] << value[1] << endl;
2191 }
```

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```
2191     }
2192 }
2193 if(evaluate(evaluate(value[0],evaluate(value[3],value[2],operation[j]),operation[i]),value[1],operation[k])-hasil==0)
2194 {
2195     count++;
2196     if(output == 1)
2197     {
2198         cout << "(" << value[e] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")"
2199             << operation[k] << value[1] << endl;
2200     }
2201 else if(output == 2)
2202 {
2203     myFile << "(" << value[0] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")"
2204         << operation[k] << value[1] << endl;
2205 }
2206 if(evaluate(evaluate(value[0],value[3],operation[i]),evaluate(value[2],value[1],operation[k]),operation[j])-hasil == 0)
2207 {
2208     count++;
2209     if(output == 1)
2210     {
2211         cout << "(" << value[e] << operation[i] << value[3] << ")" << operation[j] << "(" << value[2] <<
2212             operation[k] << value[1] << ")" << endl;
2213     }
2214 else if(output == 2)
2215 {
2216     myFile << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << "(" << value[2] <<
2217             operation[k] << value[1] << ")" << endl;
2218 }
2219 }
2220
2221     operation[k] << value[1] << ")" << endl;
2222 }
2223
2224 }
2225 if(evaluate(value[0],evaluate(evaluate(value[3],value[2],operation[j]),value[1],operation[k]),operation[i])-24 == 0)
2226 {
2227     count++;
2228     if(output == 1)
2229     {
2230         cout << value[0] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")" << operation[k] <<
2231             value[1] << ")" << endl;
2232     }
2233
2234 else if(output == 2)
2235 {
2236     myFile << value[0] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")" << operation[k] <<
2237             value[1] << ")" << endl;
2238 }
2239 }
2240 if(evaluate(value[0],evaluate(value[3],evaluate(value[2],value[1],operation[k]),operation[j]),operation[i])-24 == 0)
2241 {
2242     count++;
2243     if(output == 1)
2244     {
2245         cout << value[0] << operation[i] << "(" << value[3] << operation[j] << "(" << value[2] << operation[k]
2246             << value[1] << ")" << endl;
2247     }
2248
2249 else if(output == 2)
2250 {
2251 }
```

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```
src > 24GameSolver.cpp > main(int, char const *[])
2251     myFile << value[0] << operation[i] << "(" << value[3] << operation[j] << "(" << value[2] << operation[k]
2252     << value[1] << ")"")" << endl;
2253 }
2254 }
2255 //Permutasi 13
2256 if(evaluate(evaluate(value[2],value[0],operation[i]),value[1],operation[j]),value[3],operation[k])-hasil == 0)
2257 {
2258     count++;
2259     if(output == 1)
2260     {
2261         cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << value[1] << ")" << operation[k]
2262         << value[3] << endl;
2263     }
2264 }
2265 else if(output == 2)
2266 {
2267     myFile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << value[1] << ")" << operation[k]
2268     << value[3] << endl;
2269 }
2270 }
2271 }
2272 if(evaluate(evaluate(value[2],evaluate(value[0],value[1],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
2273 {
2274     count++;
2275     if(output == 1)
2276     {
2277         cout << "(" << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"")" << operation[k]
2278         << value[3] << endl;
2279     }
2280 }
2281 else if(output == 2)
2282 {
2283     myFile << "(" << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"")" << operation[k]
2284     << value[3] << endl;
2285 }
2286 }
2287 if(evaluate(evaluate(value[2],value[0],operation[i]),evaluate(value[1],value[3],operation[k]),operation[j])-hasil == 0)
2288 {
2289     count++;
2290     if(output == 1)
2291     {
2292         cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[1]
2293         << operation[k] << value[3] << ")"")" << endl;
2294     }
2295 }
2296 else if(output == 2)
2297 {
2298     myFile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[1]
2299     << operation[k] << value[3] << ")"")" << endl;
2300 }
2301 }
2302 if(evaluate(value[2],evaluate(evaluate(value[0],value[1],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
2303 {
2304     count++;
2305     if(output == 1)
2306     {
2307         cout << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
2308         << operation[k] << value[3] << ")"")" << endl;
2309     }
2310 }
```

```

2312     else if(output == 2)
2313     {
2314         myFile << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
2315         << operation[k] << value[3] << ")" << endl;
2316     }
2317 }
2318 }
2319 if(evaluate(value[2],evaluate(value[0],evaluate(value[1],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
2320 {
2321     count++;
2322     if(output == 1)
2323     {
2324         cout << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[1]
2325         << operation[k] << value[3] << ")" ) << endl;
2326     }
2327     else if(output == 2)
2328     {
2329         myFile << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[1]
2330         << operation[k] << value[3] << ")" ) << endl;
2331     }
2332 }
2333 }
2334 //Permutasi 14
2335 if(evaluate(evaluate(value[2],value[0],operation[i]),value[3],operation[j]),value[1],operation[k])-hasil == 0)
2336 {
2337     count++;
2338     if(output == 1)
2339     {
2340         cout << "(" << value[2] << operation[i] << value[0] << operation[j] << ")"
2341         << operation[k] << value[1] << endl;
2342     }
2343     else if(output == 2)
2344     {
2345         myFile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << value[3] << ")"
2346         << operation[k] << value[1] << endl;
2347     }
2348 }
2349 }
2350 }
2351 if(evaluate(evaluate(value[2],evaluate(value[0],value[3],operation[j]),operation[i]),value[1],operation[k])-hasil==0)
2352 {
2353     count++;
2354     if(output == 1)
2355     {
2356         cout << "(" << value[2] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")"
2357         << operation[k] << value[1] << endl;
2358     }
2359     else if(output == 2)
2360     {
2361         myFile << "(" << value[2] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")"
2362         << operation[k] << value[1] << endl;
2363     }
2364 }
2365 }
2366 if(evaluate(evaluate(value[2],value[0],operation[i]),evaluate(value[3],value[1],operation[k]),operation[j])-hasil == 0)
2367 {
2368     count++;
2369     if(output == 1)
2370     {
2371         cout << "(" << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
2372         << operation[k] << value[3] << ")" ) << endl;
2373     }
2374     else if(output == 2)
2375     {
2376         myFile << "(" << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
2377         << operation[k] << value[3] << ")" ) << endl;
2378     }
2379 }
2380 }
```

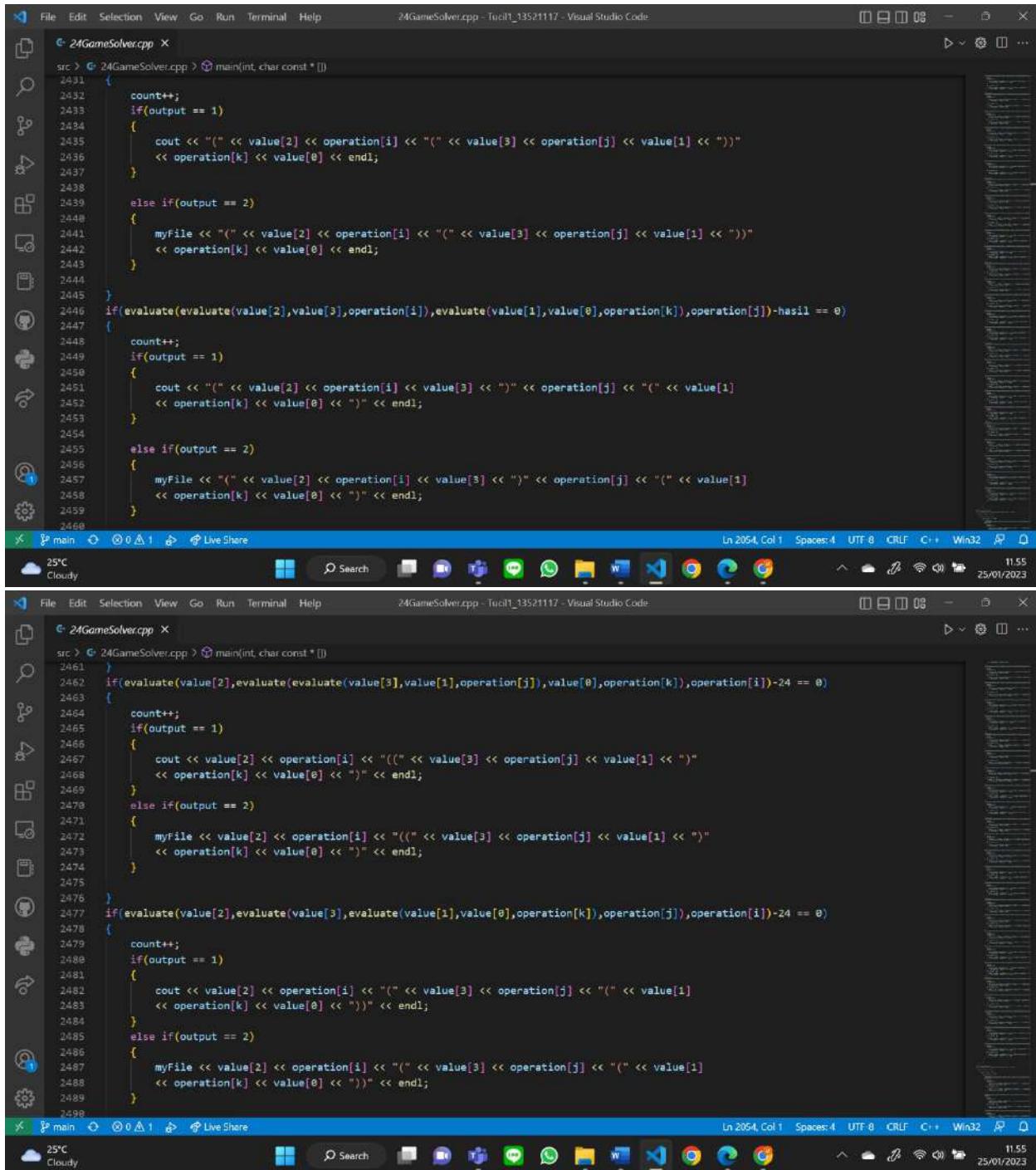
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```
2371     cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[3]
2372     << operation[k] << value[1] << ")" << endl;
2373 }
2374
2375 else if(output == 2)
2376 {
2377     myFile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[3]
2378     << operation[k] << value[1] << ")" << endl;
2379 }
2380
2381 }
2382 if(evaluate(value[2],evaluate(evaluate(value[0],value[3],operation[j]),value[1],operation[k]),operation[i])-24 == 0)
2383 {
2384     count++;
2385     if(output == 1)
2386     {
2387         cout << value[2] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")"
2388         << operation[k] << value[1] << ")" << endl;
2389     }
2390     else if(output == 2)
2391     {
2392         myFile << value[2] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")"
2393         << operation[k] << value[1] << ")" << endl;
2394     }
2395 }
2396
2397 if(evaluate(value[2],evaluate(value[0],evaluate(value[3],value[1],operation[k]),operation[j]),operation[i])-24 == 0)
2398 {
2399     count++;
2400 }
```



```
2401     if(output == 1)
2402     {
2403         cout << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[3]
2404         << operation[k] << value[1] << ")" << endl;
2405     }
2406
2407     else if(output == 2)
2408     {
2409         myFile << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[3]
2410         << operation[k] << value[1] << ")" << endl;
2411     }
2412
2413 }
2414 //Permutasi 18
2415 if(evaluate(evaluate(value[2],value[3],operation[i]),value[1],operation[j]),value[0],operation[k])-hasil == 0)
2416 {
2417     count++;
2418     if(output == 1)
2419     {
2420         cout << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << value[0] << ")"
2421         << operation[k] << value[1] << endl;
2422     }
2423     else if(output == 2)
2424     {
2425         myFile << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << value[1] << ")"
2426         << operation[k] << value[0] << endl;
2427     }
2428
2429 }
2430 if(evaluate(evaluate(value[2],evaluate(value[3],value[1],operation[i]),operation[j]),value[0],operation[k])-hasil==0)
2431 {
2432     count++;
2433     if(output == 1)
2434     {
2435         cout << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << value[0] << ")"
2436         << operation[k] << value[1] << endl;
2437     }
2438     else if(output == 2)
2439     {
2440         myFile << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << value[0] << ")"
2441         << operation[k] << value[1] << endl;
2442     }
2443 }
```

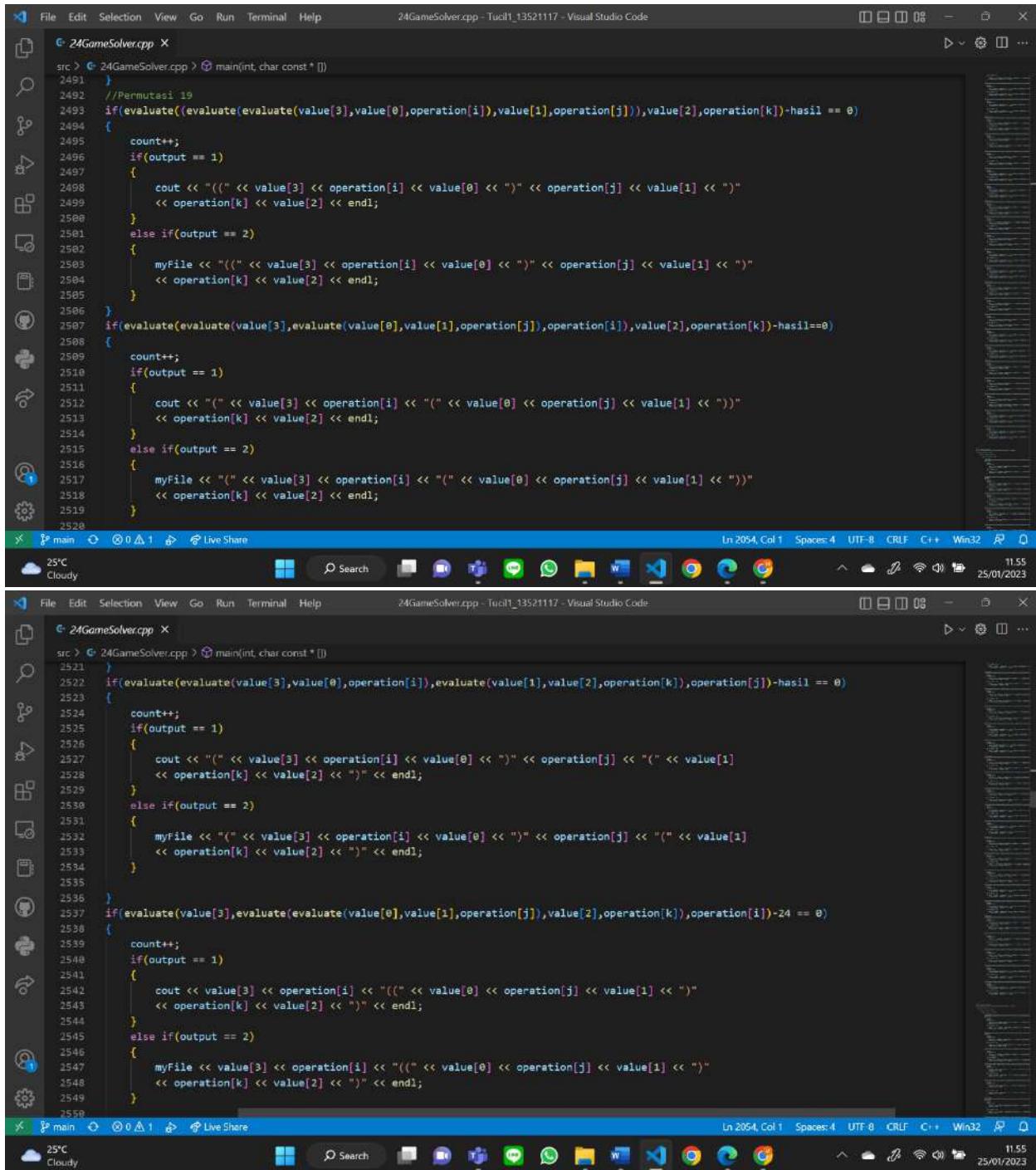
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```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const *[])
2431 {
2432     count++;
2433     if(output == 1)
2434     {
2435         cout << "(" << value[2] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")"
2436         << operation[k] << value[0] << endl;
2437     }
2438
2439     else if(output == 2)
2440     {
2441         myFile << "(" << value[2] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")"
2442         << operation[k] << value[0] << endl;
2443     }
2444
2445 }
2446 if(evaluate(evaluate(value[2],value[3],operation[i]),evaluate(value[1],value[0],operation[k]),operation[i])-hasil == 0)
2447 {
2448     count++;
2449     if(output == 1)
2450     {
2451         cout << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << "(" << value[1]
2452         << operation[k] << value[0] << ")" << endl;
2453     }
2454
2455     else if(output == 2)
2456     {
2457         myFile << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << "(" << value[1]
2458         << operation[k] << value[0] << ")" << endl;
2459     }
2460
2461 }
2462 if(evaluate(value[2],evaluate(evaluate(value[3],value[1],operation[j]),value[0],operation[k]),operation[i])-24 == 0)
2463 {
2464     count++;
2465     if(output == 1)
2466     {
2467         cout << value[2] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")"
2468         << operation[k] << value[0] << ")" << endl;
2469     }
2470     else if(output == 2)
2471     {
2472         myFile << value[2] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")"
2473         << operation[k] << value[0] << ")" << endl;
2474     }
2475
2476 }
2477 if(evaluate(value[2],evaluate(value[3],evaluate(value[1],value[0],operation[k]),operation[j]),operation[i])-24 == 0)
2478 {
2479     count++;
2480     if(output == 1)
2481     {
2482         cout << value[2] << operation[i] << "(" << value[3] << operation[j] << "(" << value[1]
2483         << operation[k] << value[0] << ")" << endl;
2484     }
2485     else if(output == 2)
2486     {
2487         myFile << value[2] << operation[i] << "(" << value[3] << operation[j] << "(" << value[1]
2488         << operation[k] << value[0] << ")" << endl;
2489     }
2490 }
```

```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const *[])
2461 }
2462 if(evaluate(value[2],evaluate(evaluate(value[3],value[1],operation[j]),value[0],operation[k]),operation[i])-24 == 0)
2463 {
2464     count++;
2465     if(output == 1)
2466     {
2467         cout << value[2] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")"
2468         << operation[k] << value[0] << ")" << endl;
2469     }
2470     else if(output == 2)
2471     {
2472         myFile << value[2] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")"
2473         << operation[k] << value[0] << ")" << endl;
2474     }
2475
2476 }
2477 if(evaluate(value[2],evaluate(value[3],evaluate(value[1],value[0],operation[k]),operation[j]),operation[i])-24 == 0)
2478 {
2479     count++;
2480     if(output == 1)
2481     {
2482         cout << value[2] << operation[i] << "(" << value[3] << operation[j] << "(" << value[1]
2483         << operation[k] << value[0] << ")" << endl;
2484     }
2485     else if(output == 2)
2486     {
2487         myFile << value[2] << operation[i] << "(" << value[3] << operation[j] << "(" << value[1]
2488         << operation[k] << value[0] << ")" << endl;
2489     }
2490 }
```

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```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const *[])
2491 }
2492 //Permutasi 19
2493 if(evaluate(evaluate(value[3],value[0],operation[i]),value[1],operation[j]),value[2],operation[k])-hasil == 0)
2494 {
2495     count++;
2496     if(output == 1)
2497     {
2498         cout << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << value[1] << ")"
2499         << operation[k] << value[2] << endl;
2500     }
2501     else if(output == 2)
2502     {
2503         myFile << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << value[1] << ")"
2504         << operation[k] << value[2] << endl;
2505     }
2506 }
2507 if(evaluate(evaluate(value[3],evaluate(value[0],value[1],operation[j]),value[2],operation[i]),value[2],operation[k])-hasil==0)
2508 {
2509     count++;
2510     if(output == 1)
2511     {
2512         cout << "(" << value[3] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
2513         << operation[k] << value[2] << endl;
2514     }
2515     else if(output == 2)
2516     {
2517         myFile << "(" << value[3] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
2518         << operation[k] << value[2] << endl;
2519     }
2520
2521
2522 if(evaluate(evaluate(value[3],value[0],operation[i]),evaluate(value[1],value[2],operation[k]),operation[j])-hasil == 0)
2523 {
2524     count++;
2525     if(output == 1)
2526     {
2527         cout << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << "(" << value[1]
2528         << operation[k] << value[2] << ")" << endl;
2529     }
2530     else if(output == 2)
2531     {
2532         myFile << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << "(" << value[1]
2533         << operation[k] << value[2] << ")" << endl;
2534     }
2535
2536 }
2537 if(evaluate(value[3],evaluate(evaluate(value[0],value[1],operation[j]),value[2],operation[k]),operation[i])-24 == 0)
2538 {
2539     count++;
2540     if(output == 1)
2541     {
2542         cout << value[3] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
2543         << operation[k] << value[2] << ")" << endl;
2544     }
2545     else if(output == 2)
2546     {
2547         myFile << value[3] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
2548         << operation[k] << value[2] << ")" << endl;
2549     }
2550 }
```

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```
2552 if(evaluate(value[3],evaluate(value[0],evaluate(value[2],operation[j]),operation[i]),operation[k])-hasil==0)
2553 {
2554     count++;
2555     if(output == 1)
2556     {
2557         cout << value[3] << operation[i] << "(" << value[0] << operation[j] << "(" << value[1]
2558         << operation[k] << value[2] << ")" ) << endl;
2559     }
2560     else if(output == 2)
2561     {
2562         myFile << value[3] << operation[i] << "(" << value[0] << operation[j] << "(" << value[1]
2563         << operation[k] << value[2] << ")" ) << endl;
2564     }
2565
2566 }
2567 //Permutasi 20
2568 if(evaluate(evaluate(value[3],value[0],operation[i]),value[2],operation[j]),value[1],operation[k]-hasil==0)
2569 {
2570     count++;
2571     if(output == 1)
2572     {
2573         cout << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << value[2] << ")"
2574         << operation[k] << value[1] << endl;
2575     }
2576     else if(output == 2)
2577     {
2578         myFile << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << value[2] << ")"
2579         << operation[k] << value[1] << endl;
2580     }
}
2581
2582 if(evaluate(evaluate(value[3],evaluate(value[0],value[2],operation[j]),operation[i]),value[1],operation[k])-hasil==0)
2583 {
2584     count++;
2585     if(output == 1)
2586     {
2587         cout << "(" << value[3] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")" )
2588         << operation[k] << value[1] << endl;
2589     }
2590     else if(output == 2)
2591     {
2592         myFile << "(" << value[3] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")" )
2593         << operation[k] << value[1] << endl;
2594     }
2595
2596 }
2597 if(evaluate(evaluate(value[3],value[0],operation[i]),evaluate(value[2],value[1],operation[k]),operation[j])-hasil==0)
2598 {
2599     count++;
2600     if(output == 1)
2601     {
2602         cout << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << "(" << value[2]
2603         << operation[k] << value[1] << ")" ) << endl;
2604     }
2605     else if(output == 2)
2606     {
2607         myFile << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << "(" << value[2]
2608         << operation[k] << value[1] << ")" ) << endl;
2609     }
}
2610 }
```

IF2211 Strategi Algoritma

```
24GameSolver.cpp // Permutasi 24
src > 24GameSolver.cpp > main(int, char const *[])
2611 if(evaluate(value[3],evaluate(evaluate(value[0],value[2],operation[j]),value[1],operation[k]),operation[i])-24 == 0)
2612 {
2613     count++;
2614     if(output == 1)
2615     {
2616         cout << value[3] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")"
2617         << operation[k] << value[1] << ")" << endl;
2618     }
2619     else if(output == 2)
2620     {
2621         myFile << value[3] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")"
2622         << operation[k] << value[1] << ")" << endl;
2623     }
2624 }
2625 if(evaluate(value[3],evaluate(value[0],evaluate(value[2],value[1],operation[k]),operation[j]),operation[i])-24 == 0)
2626 {
2627     count++;
2628     if(output == 1)
2629     {
2630         cout << value[3] << operation[i] << "(" << value[0] << operation[j] << "(" << value[2]
2631         << operation[k] << value[1] << ")" << endl;
2632     }
2633     else if(output == 2)
2634     {
2635         myFile << value[3] << operation[i] << "(" << value[0] << operation[j] << "(" << value[2]
2636         << operation[k] << value[1] << ")" << endl;
2637     }
2638 }
2639 }
2640 // Permutasi 24
2641 if(evaluate((evaluate(evaluate(value[3],value[2],operation[i]),value[0],operation[j])),value[1],operation[k])-hasil == 0)
2642 {
2643     count++;
2644     if(output == 1)
2645     {
2646         cout << "(" << value[3] << operation[i] << value[2] << ")" << operation[j] << value[0] << ")"
2647         << operation[k] << value[1] << endl;
2648     }
2649     else if(output == 2)
2650     {
2651         myFile << "(" << value[3] << operation[i] << value[2] << ")" << operation[j] << value[0] << ")"
2652         << operation[k] << value[1] << endl;
2653     }
2654 }
2655 if(evaluate(evaluate(value[3],evaluate(value[2],value[0],operation[j]),operation[i]),value[1],operation[k])-hasil==0)
2656 {
2657     count++;
2658     if(output == 1)
2659     {
2660         cout << "(" << value[3] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")"
2661         << operation[k] << value[1] << endl;
2662     }
2663     else if(output == 2)
2664     {
2665         myFile << "(" << value[3] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")"
2666         << operation[k] << value[1] << endl;
2667     }
2668 }
```

IF2211 Strategi Algoritma

```
2671 if(evaluate(evaluate(value[3],value[2],operation[i]),evaluate(value[0],value[1],operation[k]),operation[j])-hasil == 0)
2672 {
2673     count++;
2674     if(output == 1)
2675     {
2676         cout << "(" << value[3] << operation[i] << value[2] << ")" << operation[j] << "(" << value[0]
2677             << operation[k] << value[1] << ")" << endl;
2678     }
2679     else if(output == 2)
2680     {
2681         myFile << "(" << value[3] << operation[i] << value[2] << ")" << operation[j] << "(" << value[0]
2682             << operation[k] << value[1] << ")" << endl;
2683     }
2684 }
2685 if(evaluate(value[3],evaluate(evaluate(value[2],value[0],operation[j]),value[1],operation[k]),operation[i])-24 == 0)
2686 {
2687     count++;
2688     if(output == 1)
2689     {
2690         cout << value[3] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")"
2691             << operation[k] << value[1] << ")" << endl;
2692     }
2693     else if(output == 2)
2694     {
2695         myFile << value[3] << operation[i] << "(" << value[2] << operation[j] << value[0] << ""
2696             << operation[k] << value[1] << ")" << endl;
2697     }
2698 }
2699
2700
2701
2702
2703
2704
2705
2706
2707
2708
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2710
2711
2712
2713
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2715
2716
2717
2718
2719
2720
2721
2722     !=v[1]==v[2]
2723     ==value[1] && value[2]==value[1] && value[3] != value[1])
2724
2725     0; i < 4; i++)
2726
2727     j = 0; j < 4; j++)
2728
2729     int k = 0; k < 4; k++)
2730
2731
2732
2733
2734
2735
2736
2737
2738
```

IF2211 Strategi Algoritma

The image displays two side-by-side instances of the Visual Studio Code editor, both showing the same C++ file: 24GameSolver.cpp. The file contains code for solving a 24-point game using permutations of four numbers and three operations (addition, subtraction, multiplication, division). The code includes a recursive function to evaluate permutations and a loop to generate all permutations of four values (value[0] to value[3]). It also handles output to cout and myfile, and manages a hash table to store results.

Top Instance (Syntax Error):

```
src > 24GameSolver.cpp > main(int, char const *[])
2731 //Permutasi i
2732 if(evaluate(evaluate(value[0],value[1],operation[i]),value[2],operation[j]),value[3],operation[k])-
2733 hasil == 0
2734 {
2735     count++;
2736     if(output == 1)
2737     {
2738         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")" <<
2739         operation[k] << value[3] << endl;
2740     }
2741     else if(output == 2)
2742     {
2743         myfile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")" <<
2744         operation[k] << value[3] << endl;
2745     }
2746 }
2747 }
2748 if(evaluate(evaluate(value[0],evaluate(value[1],value[2],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
2749 hasil=0
2750 {
2751     count++;
2752     if(output == 1)
2753     {
2754         cout << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" )<<
2755         operation[k] << value[3] << endl;
2756     }
2757     else if(output == 2)
2758     {
2759         myfile << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" )<<
2760         operation[k] << value[3] << endl;
2761     }
2762 }
```

Bottom Instance (Corrected Code):

```
src > 24GameSolver.cpp > main(int, char const *[])
2761 }
2762 }
2763 if(evaluate(evaluate(value[0],value[1],operation[i]),evaluate(value[2],value[3],operation[k]),operation[j])-hasil == 0)
2764 {
2765     count++;
2766     if(output == 1)
2767     {
2768         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2] << operation[k]
2769         << value[3] << ")" << endl;
2770     }
2771     else if (output == 2)
2772     {
2773         myfile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2]
2774         << operation[k] << value[3] << ")" << endl;
2775     }
2776 }
2777 if(evaluate(value[0],evaluate(evaluate(value[1],value[2],operation[j]),value[3],operation[k]),operation[i])-hasil == 0)
2778 {
2779     count++;
2780     if(output == 1)
2781     {
2782         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" << operation[k] <<
2783         value[3] << ")" << endl;
2784     }
2785     else if(output == 2)
2786     {
2787         myfile << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" << operation[k] <<
2788         value[3] << ")" << endl;
2789     }
2790 }
```

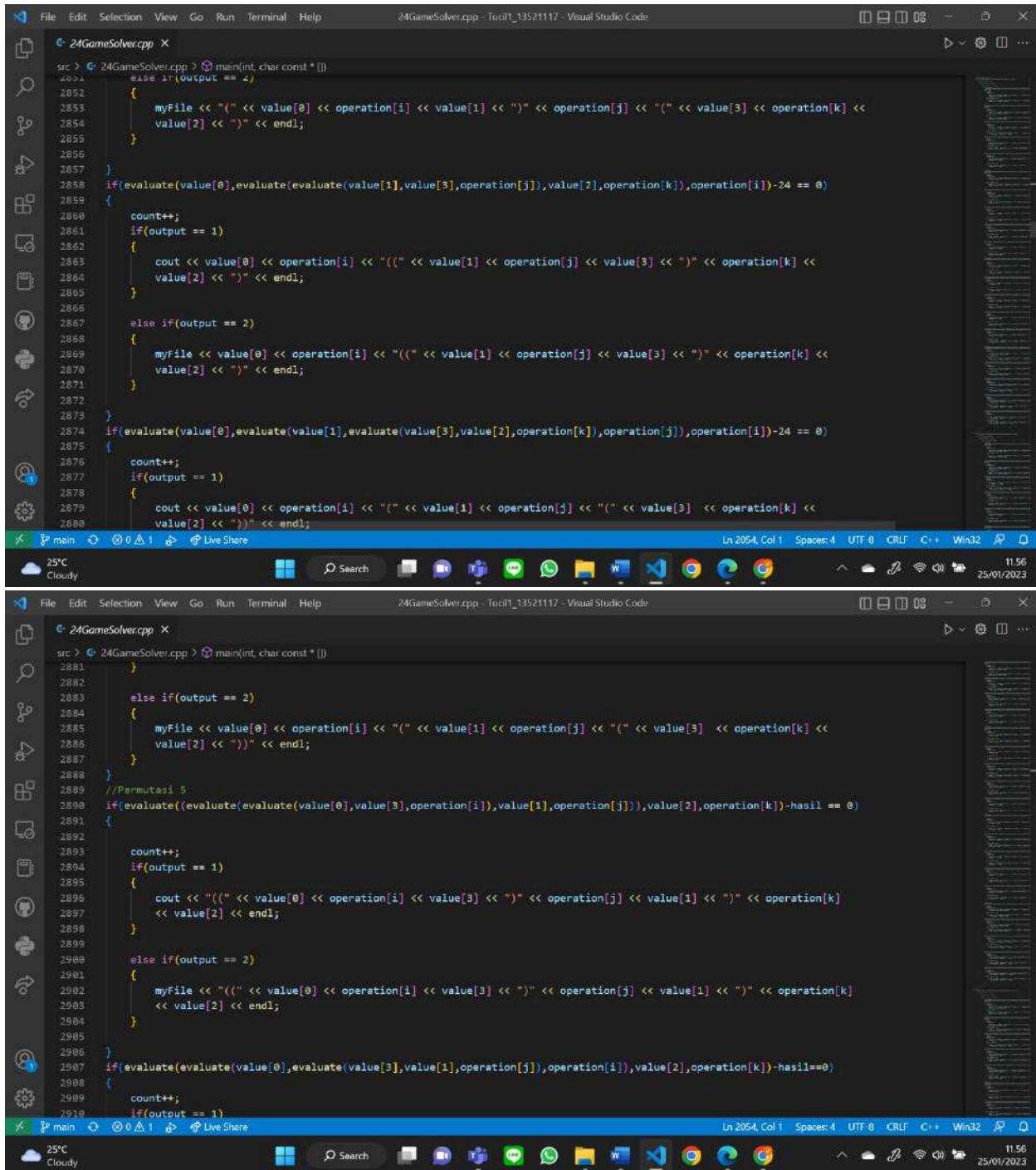
IF2211 Strategi Algoritma

```
2791 }
2792 if(evaluate(value[0],evaluate(value[1],evaluate(value[2],value[3],operation[k]),operation[j]),operation[i])-hasil == 0)
2793 {
2794     count++;
2795     if(output == 1)
2796     {
2797         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2] << operation[k] <<
2798         value[3] << ")" << endl;
2799     }
2800
2801 else if(output == 2)
2802 {
2803     myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2] << operation[k] <<
2804     value[3] << ")" << endl;
2805 }
2806
2807 }
2808 //Permutasi 2
2809 if(evaluate(evaluate(value[0],value[1],operation[i]),value[3],operation[j]),value[2],operation[k])-hasil == 0)
2810 {
2811     count++;
2812     if(output == 1)
2813     {
2814         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[3] << ")" << operation[k] <<
2815         value[2] << endl;
2816     }
2817
2818 else if(output == 2)
2819 {
2820 }
```



```
2821     myfile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[3] << ")" << operation[k] <<
2822     value[2] << endl;
2823 }
2824
2825 }
2826 if(evaluate(evaluate(value[0],evaluate(value[1],value[3],operation[j]),operation[i]),value[2],operation[k])-hasil==0)
2827 {
2828     count++;
2829     if(output == 1)
2830     {
2831         cout << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] <<
2832         value[2] << endl;
2833     }
2834
2835 else if(output == 2)
2836 {
2837     myFile << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] <<
2838     value[2] << endl;
2839 }
2840
2841 }
2842 if(evaluate(evaluate(value[0],value[1],operation[i]),evaluate(value[3],value[2],operation[k]),operation[j])-hasil == 0)
2843 {
2844     count++;
2845     if(output == 1)
2846     {
2847         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[3] << operation[k] <<
2848         value[2] << ")" << endl;
2849     }
2850 }
```

IF2211 Strategi Algoritma



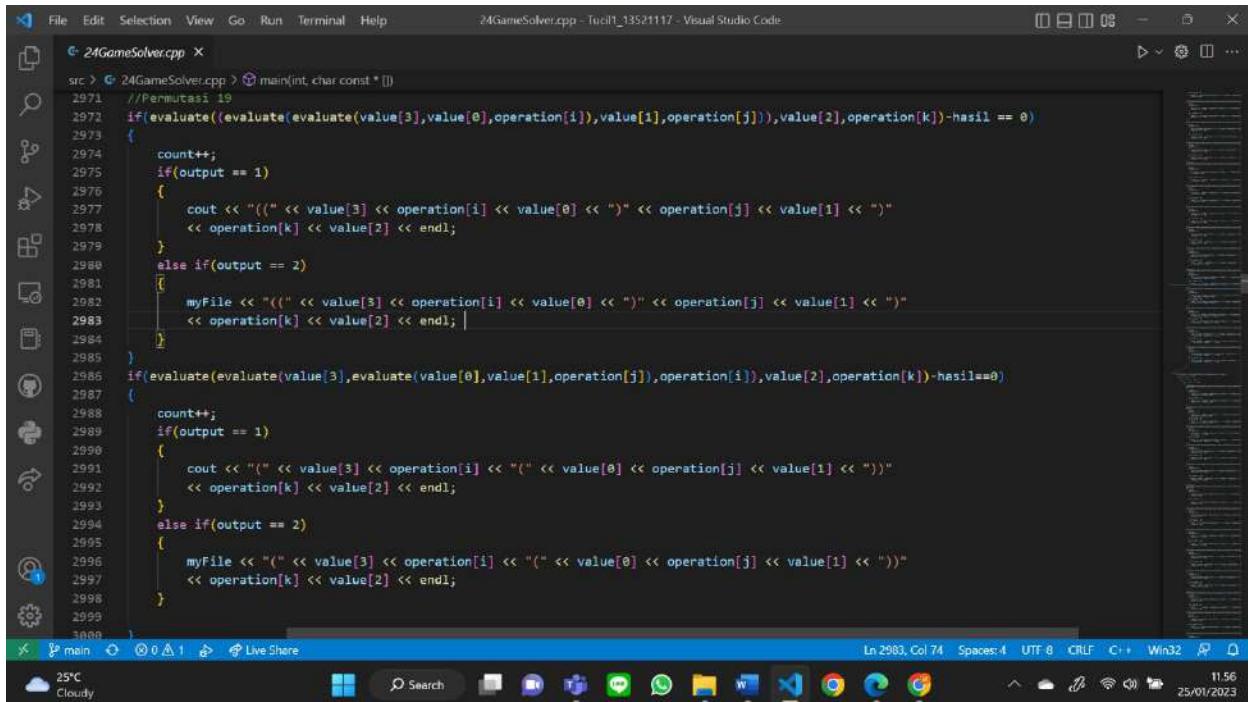
```
2851     else if(output == 2)
2852     {
2853         myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[3] << operation[k] <<
2854         value[2] << ")" << endl;
2855     }
2856
2857 }
2858 if(evaluate(value[0],evaluate(evaluate(value[1],value[3],operation[j]),value[2],operation[k]),operation[i])-24 == 0)
2859 {
2860     count++;
2861     if(output == 1)
2862     {
2863         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] <<
2864         value[2] << ")" << endl;
2865     }
2866
2867 else if(output == 2)
2868 {
2869     myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] <<
2870         value[2] << ")" << endl;
2871 }
2872
2873 }
2874 if(evaluate(value[0],evaluate(value[1],evaluate(value[3],value[2],operation[k]),operation[j]),operation[i])-24 == 0)
2875 {
2876     count++;
2877     if(output == 1)
2878     {
2879         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[3] << operation[k] <<
2880         value[2] << ")" << endl;
2881 }
2882
2883 else if(output == 2)
2884 {
2885     myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[3] << operation[k] <<
2886         value[2] << ")" << endl;
2887 }
2888 //Permutasi 5
2889 if(evaluate((evaluate(evaluate(value[0],value[3],operation[i]),value[1],operation[j])),value[2],operation[k])-hasil == 0)
2890 {
2891
2892     count++;
2893     if(output == 1)
2894     {
2895         cout << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << value[1] << ")" << operation[k]
2896         << value[2] << endl;
2897     }
2898
2899 else if(output == 2)
2900 {
2901     myFile << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << value[1] << ")" << operation[k]
2902         << value[2] << endl;
2903 }
2904
2905 }
2906 if(evaluate(evaluate(value[0],evaluate(value[3],value[1],operation[j]),operation[i]),value[2],operation[k])-hasil==0)
2907 {
2908     count++;
2909     if(output == 1)
2910 }
```

IF2211 Strategi Algoritma

```
24GameSolver.cpp
```

```
src > 24GameSolver.cpp > main(int, char const *[])
2911     {
2912         cout << "(" << value[0] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")" << operation[k]
2913         << value[2] << endl;
2914     }
2915
2916     else if(output == 2)
2917     {
2918         myFile << "(" << value[0] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")" << operation[k]
2919         << value[2] << endl;
2920     }
2921 }
2922 if(evaluate(evaluate(value[0],value[3],operation[i]),evaluate(value[1],value[2],operation[k]),operation[j])-hasil == 0)
2923 {
2924     count++;
2925     if(output == 1)
2926     {
2927         cout << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << "(" << value[1] << operation[k] <<
2928         value[2] << ")" << endl;
2929     }
2930
2931     else if(output == 2)
2932     {
2933         myFile << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << "(" << value[1] << operation[k] <<
2934         value[2] << ")" << endl;
2935     }
2936 }
2937
2938 }
2939 if(evaluate(value[0],evaluate(evaluate(value[3],value[1],operation[j]),value[2],operation[k]),operation[i])-24 == 0)
2940 {
2941     count++;
2942     if(output == 1)
2943     {
2944         cout << value[0] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")" << operation[k] <<
2945         value[2] << ")" << endl;
2946     }
2947
2948     else if(output == 2)
2949     {
2950         myFile << value[0] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")" << operation[k] <<
2951         value[2] << ")" << endl;
2952     }
2953 }
2954
2955 if(evaluate(value[0],evaluate(value[3],evaluate(value[1],value[2],operation[k]),operation[j]),operation[i])-24 == 0)
2956 {
2957     count++;
2958     if(output == 1)
2959     {
2960         cout << value[0] << operation[i] << "(" << value[3] << operation[j] << "(" << value[1] << operation[k] <<
2961         value[2] << ")" << endl;
2962     }
2963
2964     else if(output == 2)
2965     {
2966         myFile << value[0] << operation[i] << "(" << value[3] << operation[j] << "(" << value[1] << operation[k]
2967         << value[2] << ")" << endl;
2968     }
2969 }
```

IF2211 Strategi Algoritma



```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const*[])
2971 //Permutasi 19
2972 if(evaluate(evaluate(value[3],value[0],operation[i]),value[1],operation[j]),value[2],operation[k])-hasil == 0)
2973 {
2974     count++;
2975     if(output == 1)
2976     {
2977         cout << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << value[1] << ")"
2978         << operation[k] << value[2] << endl;
2979     }
2980     else if(output == 2)
2981     {
2982         myFile << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << value[1] << ")"
2983         << operation[k] << value[2] << endl;
2984     }
2985 }
2986 if(evaluate(evaluate(value[3],evaluate(value[0],value[1],operation[j]),operation[i]),value[2],operation[k])-hasil==0)
2987 {
2988     count++;
2989     if(output == 1)
2990     {
2991         cout << "(" << value[3] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
2992         << operation[k] << value[2] << endl;
2993     }
2994     else if(output == 2)
2995     {
2996         myFile << "(" << value[3] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
2997         << operation[k] << value[2] << endl;
2998     }
2999 }
```

IF2211 Strategi Algoritma

```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const[])
3001 if(evaluate(evaluate(value[3],value[0],operation[i]),evaluate(value[1],value[2],operation[k]),operation[j])-hasil == 0)
3002 {
3003     count++;
3004     if(output == 1)
3005     {
3006         cout << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << "(" << value[1]
3007             << operation[k] << value[2] << ")" << endl;
3008     }
3009     else if(output == 2)
3010     {
3011         myFile << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << "(" << value[1]
3012             << operation[k] << value[2] << ")" << endl;
3013     }
3014 }
3015 }
3016 if(evaluate(value[3],evaluate(evaluate(value[0],value[1],operation[j]),value[2],operation[k]),operation[i])-24 == 0)
3017 {
3018     count++;
3019     if(output == 1)
3020     {
3021         cout << value[3] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
3022             << operation[k] << value[2] << ")" << endl;
3023     }
3024     else if(output == 2)
3025     {
3026         myFile << value[3] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
3027             << operation[k] << value[2] << ")" << endl;
3028     }
3029 }
3030 }

24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const[])
3031 if(evaluate(value[3],evaluate(value[0],evaluate(value[1],value[2],operation[k]),operation[j]),operation[i])-24 == 0)
3032 {
3033     count++;
3034     if(output == 1)
3035     {
3036         cout << value[3] << operation[i] << "(" << value[0] << operation[j] << "(" << value[1]
3037             << operation[k] << value[2] << ")" << endl;
3038     }
3039     else if(output == 2)
3040     {
3041         myFile << value[3] << operation[i] << "(" << value[0] << operation[j] << "(" << value[1]
3042             << operation[k] << value[2] << ")" << endl;
3043     }
3044 }
3045
3046
3047
3048
3049
3050
3051
3052     == value[1] && value[3] == value[1] && value[2] != value[1])
3053
3054     0; i < 4; i++)
3055
3056     j = 0; j < 4; j++)
3057
3058     int k = 0; k < 4; k++)
3059
3060
3061 //Permutasi 3
```

IF2211 Strategi Algoritma

```
src > 24GameSolver.cpp > main(int, char const*[])
3861 if(evaluate(evaluate(value[0],value[1],operation[i]),value[2],operation[j]),value[3],operation[k])-hasil == 0)
3862 {
3863     count++;
3864     if(output == 1)
3865     {
3866         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")" <<
3867         operation[k] << value[3] << endl;
3868     }
3869     else if(output == 2)
3870     {
3871         myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")" <<
3872         operation[k] << value[3] << endl;
3873     }
3874 }
3875 }
3876 if(evaluate(evaluate(value[0],evaluate(value[1],value[2],operation[j]),value[3],operation[i]),value[3],operation[k])-hasil==0)
3877 {
3878     count++;
3879     if(output == 1)
3880     {
3881         cout << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" <<
3882         operation[k] << value[3] << endl;
3883     }
3884     else if(output == 2)
3885     {
3886         myFile << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" <<
3887         operation[k] << value[3] << endl;
3888     }
3889 }
3890 }
```



```
src > 24GameSolver.cpp > main(int, char const*[])
3891 }
3892 if(evaluate(evaluate(value[0],value[1],operation[i]),evaluate(value[2],value[3],operation[k]),operation[j])-hasil == 0)
3893 {
3894     count++;
3895     if(output == 1)
3896     {
3897         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2] << operation[k]
3898         << value[3] << ")" << endl;
3899     }
3900     else if (output == 2)
3901     {
3902         myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2]
3903         << operation[k] << value[3] << ")" << endl;
3904     }
3905 }
3906 if(evaluate(value[0],evaluate(evaluate(value[1],value[2],operation[j]),value[3],operation[k]),operation[i])-hasil == 0)
3907 {
3908     count++;
3909     if(output == 1)
3910     {
3911         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" << operation[k] <<
3912         value[3] << ")" << endl;
3913     }
3914     else if(output == 2)
3915     {
3916         myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" << operation[k] <<
3917         value[3] << ")" << endl;
3918     }
3919 }
3920 }
```

IF2211 Strategi Algoritma

```
src > 24GameSolver.cpp > main(int, char const *[])
3144     int evaluate(value[0],evaluate,value[1],evaluate,value[2],operation[i],operation[j],operation[k])-hasil==0
3122    {
3123        count++;
3124        if(output == 1)
3125        {
3126            cout << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2] << operation[k] <<
3127            value[3] << ")" ) << endl;
3128        }
3129
3130        else if(output == 2)
3131        {
3132            myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2] << operation[k] <<
3133            value[3] << ")" ) << endl;
3134        }
3135
3136    }
3137    //Permutasi 2
3138    if(evaluate(evaluate(value[0],value[1],operation[i]),value[3],operation[j]),value[2],operation[k])-hasil == 0)
3139    {
3140        count++;
3141        if(output == 1)
3142        {
3143            cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[3] << ")" << operation[k] <<
3144            value[2] << endl;
3145        }
3146
3147        else if(output == 2)
3148        {
3149            myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[3] << ")" << operation[k] <<
3150            value[2] << endl;
3151        }
3152    }
3153
3154 }
3155 if(evaluate(evaluate(value[0],evaluate(value[1],value[3],operation[j]),operation[i]),value[2],operation[k])-hasil==0)
3156 {
3157     count++;
3158     if(output == 1)
3159     {
3160         cout << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" ) << operation[k] <<
3161         value[2] << endl;
3162     }
3163
3164     else if(output == 2)
3165     {
3166         myFile << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" ) << operation[k] <<
3167         value[2] << endl;
3168     }
3169 }
3170
3171 if(evaluate(evaluate(value[0],value[1],operation[i]),evaluate(value[3],value[2],operation[k]),operation[j])-hasil == 0)
3172 {
3173     count++;
3174     if(output == 1)
3175     {
3176         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[3] << operation[k] <<
3177         value[2] << ")" ) << endl;
3178     }
3179
3180     else if(output == 2)
3181     {
3182         myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[3] << operation[k] <<
3183         value[2] << ")" ) << endl;
3184     }
3185 }
```

IF2211 Strategi Algoritma

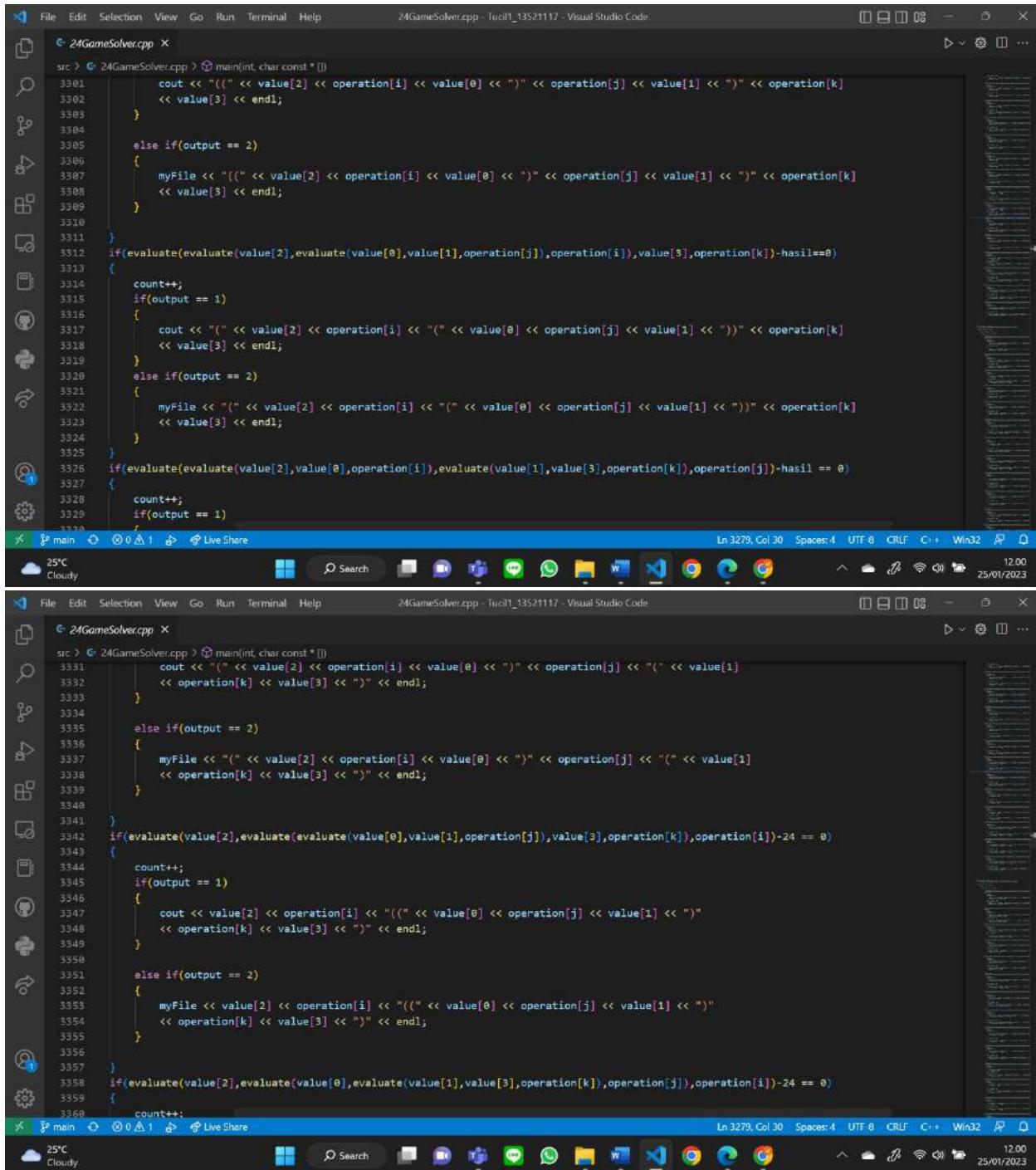
```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
3181 {
3182     myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[3] << operation[k] <<
3183     value[2] << ")" << endl;
3184 }
3185
3186 }
3187 if(evaluate(value[0],evaluate(evaluate(value[1],value[3],operation[j]),value[2],operation[k]),operation[i])-24 == 0)
3188 {
3189     count++;
3190     if(output == 1)
3191     {
3192         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] <<
3193         value[2] << ")" << endl;
3194     }
3195
3196 else if(output == 2)
3197 {
3198     myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] <<
3199         value[2] << ")" << endl;
3200 }
3201
3202 }
3203 if(evaluate(value[0],evaluate(value[1],evaluate(value[3],value[2],operation[k]),operation[j]),operation[i])-24 == 0)
3204 {
3205     count++;
3206     if(output == 1)
3207     {
3208         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[3] << operation[k] <<
3209         value[2] << ")" << endl;
3210     }
3211
3212 else if(output == 2)
3213 {
3214     myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[3] << operation[k] <<
3215         value[2] << ")" << endl;
3216 }
3217
3218 //Permutasi 3
3219 if(evaluate(evaluate(value[0],value[2],operation[i]),value[1],operation[j]),value[3],operation[k])-hasil == 0)
3220 {
3221     count++;
3222     if(output == 1)
3223     {
3224         cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[1] << ")" << operation[k] <<
3225         value[3] << endl;
3226     }
3227
3228 else if(output == 2)
3229 {
3230     myFile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[1] << ")" << operation[k] <<
3231         value[3] << endl;
3232 }
3233
3234 if(evaluate(evaluate(value[0],evaluate(value[2],value[1],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
3235 {
3236     count++;
3237     if(output == 1)
3238     {
3239         cout << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k] <<
```

```
11.59
25/01/2023
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
3240         value[3] << endl;
3241
3242 if(evaluate(evaluate(value[0],evaluate(value[2],value[1],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
3243 {
3244     count++;
3245     if(output == 1)
3246     {
3247         cout << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k] <<
```

IF2211 Strategi Algoritma

```
src > 24GameSolver.cpp > main(int, char const *[])
3241     value[3] << endl;
3242 }
3243
3244 else if(output == 2)
3245 {
3246     myFile << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k]
3247     << value[3] << endl;
3248 }
3249
3250 }
3251 if(evaluate(evaluate(value[0],value[2],operation[i]),evaluate(value[1],value[3],operation[k]),operation[j])-hasil == 0)
3252 {
3253     count++;
3254     if(output == 1)
3255     {
3256         cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[1] << operation[k]
3257         << value[3] << ")" << endl;
3258     }
3259
3260 else if(output == 2)
3261 {
3262     myFile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[1] << operation[k]
3263     << value[3] << ")" << endl;
3264 }
3265 }
3266 if(evaluate(value[0],evaluate(evaluate(value[2],value[1],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
3267 {
3268     count++;
3269     if(output == 1)
3270     {
3271         cout << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k]
3272         << value[3] << ")" << endl;
3273     }
3274 else if(output == 2)
3275 {
3276     myFile << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k] <<
3277     value[3] << ")" << endl;
3278 }
3279 }
3280 if(evaluate(value[0],evaluate(value[2],evaluate(value[1],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
3281 {
3282     count++;
3283     if(output == 1)
3284     {
3285         cout << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[1] << operation[k] <<
3286         value[3] << ")" << endl;
3287     }
3288
3289 else if(output == 2)
3290 {
3291     myFile << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[1] << operation[k] <<
3292     value[3] << ")" << endl;
3293 }
3294 }
3295 //Permutasi 13
3296 if(evaluate((evaluate(evaluate(value[2],value[0],operation[i]),value[1],operation[j])),value[3],operation[k])-hasil == 0)
3297 {
3298     count++;
3299     if(output == 1)
3300     {
```

IF2211 Strategi Algoritma



```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const*[])
3381     cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j]
3382         << value[1] << ")" << operation[k]
3383     << endl;
3384
3385     else if(output == 2)
3386     {
3387         myFile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j]
3388             << value[1] << ")" << operation[k]
3389         << endl;
3390     }
3391 }
3392 if(evaluate(evaluate(value[2]),evaluate(value[0],value[1],operation[j],operation[i]),value[3],operation[k])-hasil==0)
3393 {
3394     count++;
3395     if(output == 1)
3396     {
3397         cout << "(" << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
3398             << operation[k]
3399         << endl;
3400     }
3401     else if(output == 2)
3402     {
3403         myFile << "(" << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
3404             << operation[k]
3405         << endl;
3406     }
3407     if(evaluate(evaluate(value[2],value[0],operation[1]),evaluate(value[1],value[3],operation[k]),operation[j])-hasil == 0)
3408     {
3409         count++;
3410         if(output == 1)
3411             cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j]
3412                 << "(" << value[1]
3413                     << operation[k] << value[3] << ")" << endl;
3414     }
3415     else if(output == 2)
3416     {
3417         myFile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[1]
3418                     << operation[k] << value[3] << ")" << endl;
3419     }
3420     if(evaluate(evaluate(value[2],value[0],operation[1]),evaluate(value[1],value[3],operation[k]),operation[j])-hasil == 0)
3421     {
3422         count++;
3423         if(output == 1)
3424             cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j]
3425                 << "(" << value[1]
3426                     << operation[k] << value[3] << ")" << endl;
3427     }
3428     else if(output == 2)
3429     {
3430         myFile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[1]
3431                     << operation[k] << value[3] << ")" << endl;
3432     }
3433     if(evaluate(evaluate(value[2],evaluate(value[0],value[1],operation[j],value[3],operation[k]),operation[i])-24 == 0)
3434     {
3435         count++;
3436         if(output == 1)
3437         {
3438             cout << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
3439                 << operation[k] << value[3] << ")" << endl;
3440         }
3441         else if(output == 2)
3442         {
3443             myFile << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << "
3444                 << operation[k] << value[3] << ")" << endl;
3445         }
3446     }
3447     if(evaluate(evaluate(value[2],evaluate(value[0],evaluate(value[1],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
3448     {
3449         count++;
3450         if(output == 1)
3451             cout << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
3452                 << operation[k] << value[3] << ")" << endl;
3453     }
3454     else if(output == 2)
3455     {
3456         myFile << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << "
3457                 << operation[k] << value[3] << ")" << endl;
3458     }
3459     if(evaluate(evaluate(value[2],evaluate(value[0],evaluate(value[1],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
3460     {
3461         count++;
3462         if(output == 1)
3463             cout << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
3464                 << operation[k] << value[3] << ")" << endl;
3465     }
3466     else if(output == 2)
3467     {
3468         myFile << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << "
3469                 << operation[k] << value[3] << ")" << endl;
3470     }
3471 }
```

```

File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
3361     if(output == 1)
3362     {
3363         cout << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[1]
3364             << operation[k] << value[3] << ")" ) " << endl;
3365     }
3366     else if(output == 2)
3367     {
3368         myFile << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[1]
3369             << operation[k] << value[3] << ")" ) " << endl;
3370     }
3371 }
3372
3373
3374
3375
3376
3377
3378
3379
3380     } = v[2] = v[3]
3381     ] == value[2] && value[3] == value[2] && value[1] != value[2])
3382
3383     0; i < 4; i++)
3384
3385     j = 0; j < 4; j++)
3386
3387     (int k = 0; k < 4; k++)
3388
3389     //Pemutasi:
3390     if(evaluate(evaluate(value[0],value[1],operation[i]),value[2],operation[j]),value[3],operation[k])-
3391
3392 main < 0 0 1 Live Share 12.00 25/01/2023
29°C Cloudy

```

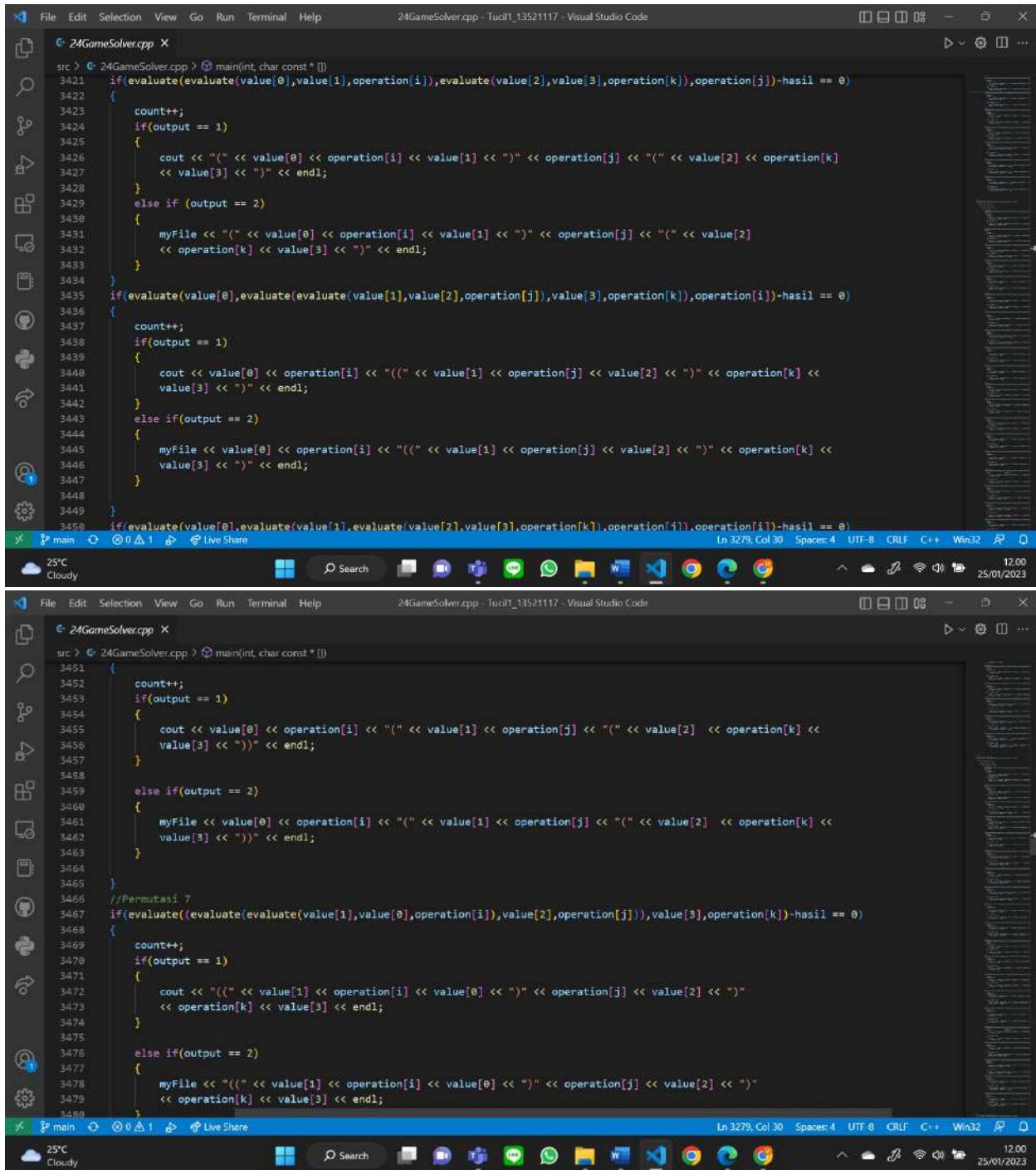


```

File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
3391 hasil == 0
3392 {
3393     count++;
3394     if(output == 1)
3395     {
3396         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")" <<
3397             operation[k] << value[3] << endl;
3398     }
3399     else if(output == 2)
3400     {
3401         myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")" <<
3402             operation[k] << value[3] << endl;
3403     }
3404
3405
3406     if(evaluate(evaluate(value[0],evaluate(value[1],value[2],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
3407     hasil==0
3408     {
3409         count++;
3410         if(output == 1)
3411         {
3412             cout << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" ) " <<
3413                 operation[k] << value[3] << endl;
3414         }
3415         else if(output == 2)
3416         {
3417             myFile << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" ) " <<
3418                 operation[k] << value[3] << endl;
3419         }
3420     }
3421
3422 main < 0 0 1 Live Share 12.00 25/01/2023
29°C Cloudy

```

IF2211 Strategi Algoritma



```
src > 24GameSolver.cpp > main(int, char const *[])
3421     if(evaluate(evaluate(value[0],value[1],operation[i]),evaluate(value[2],value[3],operation[k]),operation[j])-hasil == 0)
3422     {
3423         count++;
3424         if(output == 1)
3425         {
3426             cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2] << operation[k]
3427             << value[3] << ")" << endl;
3428         }
3429         else if (output == 2)
3430         {
3431             myFile << "(" << value[0] << operation[1] << value[1] << ")" << operation[j] << "(" << value[2]
3432             << operation[k] << value[3] << ")" << endl;
3433         }
3434     }
3435     if(evaluate(value[0],evaluate(evaluate(value[1],value[2],operation[j]),value[3],operation[k]),operation[i])-hasil == 0)
3436     {
3437         count++;
3438         if(output == 1)
3439         {
3440             cout << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" << operation[k] <<
3441             value[3] << ")" << endl;
3442         }
3443         else if(output == 2)
3444         {
3445             myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" << operation[k] <<
3446             value[3] << ")" << endl;
3447         }
3448     }
3449 }
3450 if(evaluate(value[0],evaluate(value[1],evaluate(value[2],value[3],operation[k]),operation[i]),operation[j])-hasil == 0)
3451 {
3452     count++;
3453     if(output == 1)
3454     {
3455         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2] << operation[k] <<
3456             value[3] << ")" << endl;
3457     }
3458     else if(output == 2)
3459     {
3460         myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2] << operation[k] <<
3461             value[3] << ")" << endl;
3462     }
3463 }
3464
3465 //Permutasi 7
3466 if(evaluate(evaluate(evaluate(value[1],value[0],operation[i]),value[2],operation[j]),value[3],operation[k])-hasil == 0)
3467 {
3468     count++;
3469     if(output == 1)
3470     {
3471         cout << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << value[2] << ")"
3472             << operation[k] << value[3] << endl;
3473     }
3474
3475     else if(output == 2)
3476     {
3477         myFile << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << value[2] << ")"
3478             << operation[k] << value[3] << endl;
3479     }
3480 }
```

IF2211 Strategi Algoritma

```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const[])
3482 }
3483 if(evaluate(evaluate(value[1],evaluate(value[0],value[2],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
3484 {
3485     count++;
3486     if(output == 1)
3487     {
3488         cout << "(" << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")" << operation[k]
3489         << value[3] << endl;
3490     }
3491 else if(output == 2)
3492 {
3493     myFile << "(" << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")"
3494     << operation[k] << value[3] << endl;
3495 }
3496 if(evaluate(evaluate(value[1],value[0],operation[i]),evaluate(value[2],value[3],operation[k]),operation[j])-hasil == 0)
3497 {
3498     count++;
3499     if(output == 1)
3500     {
3501         cout << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << "(" << value[2]
3502         << operation[k] << value[3] << ")" << endl;
3503     }
3504 else if(output == 2)
3505 {
3506     myFile << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << "(" << value[2]
3507         << operation[k] << value[3] << ")" << endl;
3508 }
3509 if(evaluate(evaluate(value[1],evaluate(value[0],value[2],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
3510 {
3511     cout << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << "(" << value[2]
3512         << operation[k] << value[3] << ")" << endl;
3513 }
3514 if(evaluate(value[1],evaluate(evaluate(value[0],value[2],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
3515 {
3516     count++;
3517     if(output == 1)
3518     {
3519         cout << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")" << operation[k]
3520             << value[3] << endl;
3521     }
3522 else if(output == 2)
3523 {
3524     myFile << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")" << operation[k]
3525             << value[3] << endl;
3526 }
3527 if(evaluate(value[1],evaluate(value[0],evaluate(value[2],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
3528 {
3529     count++;
3530     if(output == 1)
3531     {
3532         cout << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[2] << operation[k]
3533             << value[3] << ")" << endl;
3534 }
3535 }
```

IF2211 Strategi Algoritma

```
src > 24GameSolver.cpp > main(int, char const *[])
3541     else if(output == 2)
3542     {
3543         myFile << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[2] << operation[k]
3544             << value[3] << ")" << endl;
3545     }
3546 }
3547
3548 }
3549 //Permutasi 9
3550 if(evaluate(evaluate(evaluate(value[1],value[2],operation[i]),value[0],operation[j]),value[3],operation[k])-hasil == 0)
3551 {
3552     count++;
3553     if(output == 1)
3554     {
3555         cout << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << value[0] << ")"
3556             << operation[k]
3557             << value[3] << endl;
3558     }
3559     else if(output == 2)
3560     {
3561         myFile << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << value[0] << ")"
3562             << operation[k]
3563             << value[3] << endl;
3564     }
3565     if(evaluate(evaluate(value[1],evaluate(value[2],value[0],operation[j]),value[3],operation[k])-hasil==0)
3566     {
3567         count++;
3568         if(output == 1)
3569         {
3570             cout << "(" << value[1] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")"
3571                 << operation[k]
3572                 << value[3] << endl;
3573     }
3574     else if(output == 2)
3575     {
3576         myFile << "(" << value[1] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")"
3577             << value[3] << endl;
3578     }
3579 }
3580
3581 if(evaluate(evaluate(value[1],value[2],operation[i]),evaluate(value[0],value[3],operation[k]),operation[j])-hasil == 0)
3582 {
3583     count++;
3584     if(output == 1)
3585     {
3586         cout << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << "(" << value[0] << operation[k]
3587             << value[3] << ")" << endl;
3588     }
3589     else if(output == 2)
3590     {
3591         myFile << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << "(" << value[0] << operation[k]
3592             << value[3] << ")" << endl;
3593     }
3594 }
3595
3596 if(evaluate(value[1],evaluate(evaluate(value[2],value[0],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
3597 {
3598     count++;
3599     if(output == 1)
3600     {
```

IF2211 Strategi Algoritma

```
src > 24GameSolver.cpp > main(int, char const *[])
3601     cout << value[1] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")" << operation[k]
3602     << value[3] << endl;
3603 }
3604
3605 else if(output == 2)
3606 {
3607     myFile << value[1] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")" << operation[k]
3608     << value[3] << endl;
3609 }
3610
3611 }
3612 if(evaluate(value[1],evaluate(value[2],evaluate(value[0],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
3613 {
3614     count++;
3615     if(output == 1)
3616     {
3617         cout << value[1] << operation[i] << "(" << value[2] << operation[j] << "(" << value[0] << operation[k] <<
3618         value[3] << ")" << endl;
3619     }
3620
3621     else if(output == 2)
3622     {
3623         myFile << value[1] << operation[i] << "(" << value[2] << operation[j] << "(" << value[0] << operation[k]
3624         << value[3] << ")" << endl;
3625     }
3626
3627 }
3628
3629 //Permutasi 10
3630 if(evaluate(evaluate(evaluate(value[1],value[2],operation[i]),value[3],operation[j]),value[0],operation[k])-hasil == 0)
3631 {
3632     count++;
3633     if(output == 1)
3634     {
3635         cout << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << value[3] << ")" << operation[k]
3636         << value[0] << endl;
3637 }
3638
3639 else if(output == 2)
3640 {
3641     myFile << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << value[3] << ")" << operation[k]
3642         << value[0] << endl;
3643 }
3644 if(evaluate(evaluate(value[1],evaluate(value[2],value[3],operation[j]),operation[i]),value[0],operation[k])-hasil==0)
3645 {
3646     count++;
3647     if(output == 1)
3648     {
3649         cout << "(" << value[1] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k]
3650         << value[0] << endl;
3651     }
3652
3653     else if(output == 2)
3654     {
3655         myFile << "(" << value[1] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" <<
3656         operation[k] << value[0] << endl;
3657     }
3658
3659 }
```

IF2211 Strategi Algoritma

```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - Tucll_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
3661 {
3662     count++;
3663     if(output == 1)
3664     {
3665         cout << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << "(" << value[3] <<
3666         operation[k] << value[0] << ")" << endl;
3667     }
3668     else if(output == 2)
3669     {
3670         myFile << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << "(" << value[3] <<
3671         operation[k] << value[0] << ")" << endl;
3672     }
3673 }
3674 if(evaluate(value[1],evaluate(evaluate(value[2],value[3],operation[j]),value[0],operation[k]),operation[i])-24 == 0)
3675 {
3676     count++;
3677     if(output == 1)
3678     {
3679         cout << value[1] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k]
3680         << value[0] << ")" << endl;
3681     }
3682     else if(output == 2)
3683     {
3684         myFile << value[1] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")"
3685         << operation[k] << value[0] << ")" << endl;
3686     }
3687 }
3688
3689
3690
3691 if(evaluate(value[1],evaluate(value[2],evaluate(value[3],value[0],operation[k]),operation[j]),operation[i])-24 == 0)
3692 {
3693     count++;
3694     if(output == 1)
3695     {
3696         cout << value[1] << operation[i] << "(" << value[2] << operation[j] << "(" << value[3] << operation[k]
3697         << value[0] << ")" << endl;
3698     }
3699     else if(output == 2)
3700     {
3701         myFile << value[1] << operation[i] << "(" << value[2] << operation[j] << "(" << value[3] << operation[k]
3702         << value[0] << ")" << endl;
3703     }
3704
3705
3706
3707
3708
3709
3710
3711 a = value[0] = value[3];
3712 b = value[2] && value[1] != value[0] && value[3] != value[0];
3713
3714 i < 4; i++)
3715
3716 e; j < 4; j++)
3717
3718 k = 0; k < 4; k++)
3719
3720 empatasi 1
3721
3722
3723
3724
3725
3726
3727
3728 empatasi 1
```

IF2211 Strategi Algoritma

```
src > 24GameSolver.cpp > main(int, char const*[])
3721 if(evaluate(evaluate(value[0],value[1],operation[i]),value[2],operation[j]),value[3],operation[k])-hasil == 0)
3722 {
3723     count++;
3724     if(output == 1)
3725     {
3726         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")" <<
3727             operation[k] << value[3] << endl;
3728     }
3729     else if(output == 2)
3730     {
3731         myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")" <<
3732             operation[k] << value[3] << endl;
3733     }
3734 }
3735
3736 }
3737 if(evaluate(evaluate(value[0],evaluate(value[1],value[2],operation[j]),value[3],operation[i]),value[3],operation[k])-hasil==0)
3738 {
3739     count++;
3740     if(output == 1)
3741     {
3742         cout << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" <<
3743             operation[k] << value[3] << endl;
3744     }
3745     else if(output == 2)
3746     {
3747         myFile << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" <<
3748             operation[k] << value[3] << endl;
3749     }
3750 }
```



```
src > 24GameSolver.cpp > main(int, char const*[])
3751 }
3752 if(evaluate(evaluate(value[0],value[1],operation[i]),evaluate(value[2],value[3],operation[k]),operation[j])-hasil == 0)
3753 {
3754     count++;
3755     if(output == 1)
3756     {
3757         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2] << operation[k]
3758             << value[3] << ")" << endl;
3759     }
3760     else if (output == 2)
3761     {
3762         myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2]
3763             << operation[k] << value[3] << ")" << endl;
3764     }
3765 }
3766 if(evaluate(value[0],evaluate(evaluate(value[1],value[2],operation[j]),value[3],operation[k]),operation[i])-hasil == 0)
3767 {
3768     count++;
3769     if(output == 1)
3770     {
3771         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" << operation[k] <<
3772             value[3] << ")" << endl;
3773     }
3774     else if(output == 2)
3775     {
3776         myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" << operation[k] <<
3777             value[3] << ")" << endl;
3778     }
3779 }
3780 }
```

IF2211 Strategi Algoritma

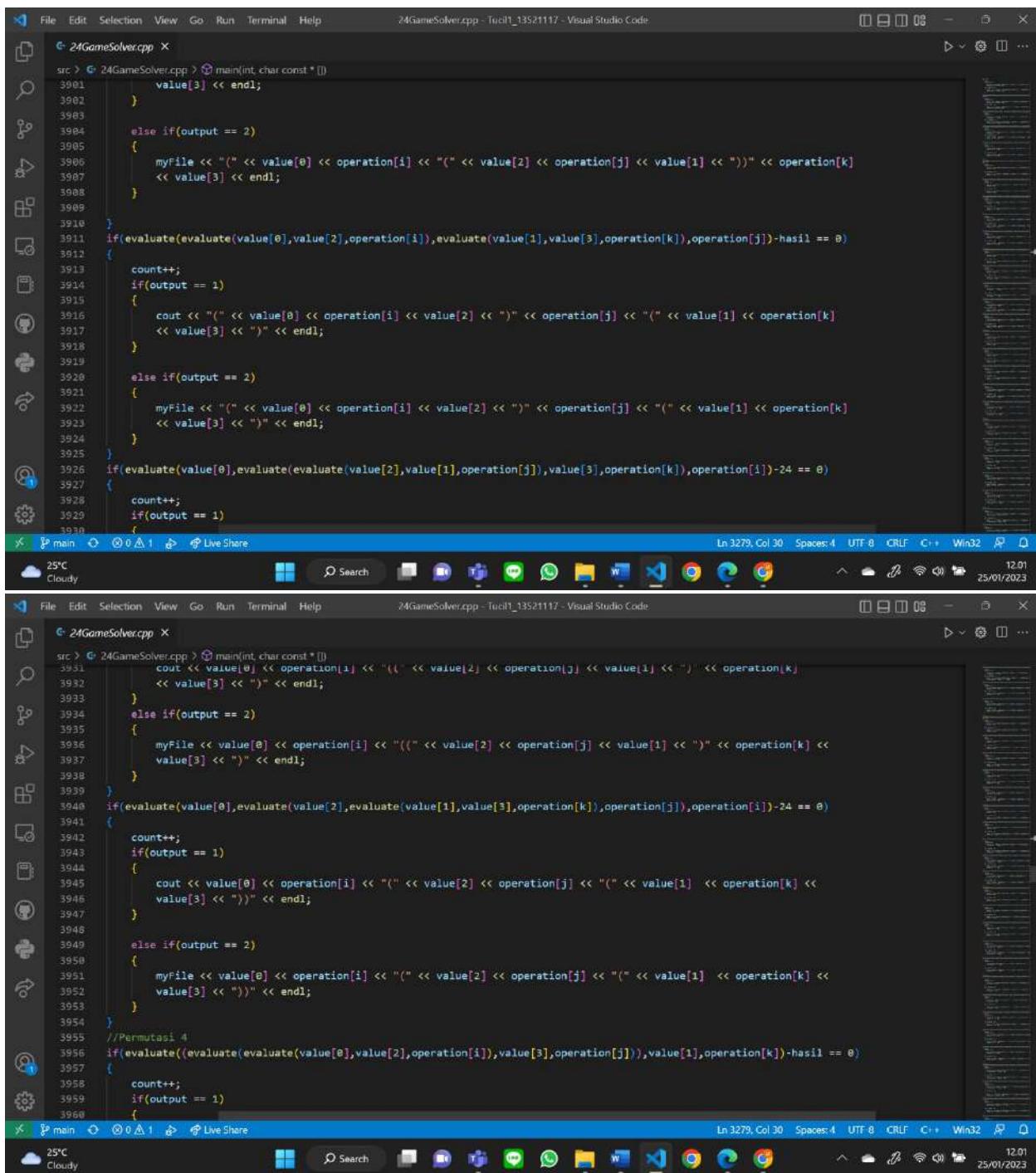
```
src > 24GameSolver.cpp > main(int, char const *[])
3781 if(evaluate(value[0],evaluate(value[1],evaluate(value[2],value[3],operation[k]),operation[i]),operation[j])-hasil == 0)
3782 {
3783     count++;
3784     if(output == 1)
3785     {
3786         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2] << operation[k] <<
3787             value[3] << ")" << endl;
3788     }
3789     else if(output == 2)
3790     {
3791         myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2] << operation[k] <<
3792             value[3] << ")" << endl;
3793     }
3794 }
3795
3796 }
3797 //Permutasi 2
3798 if(evaluate((evaluate(value[0],value[1],operation[i]),value[3],operation[j]),value[2],operation[k])-hasil == 0)
3799 {
3800     count++;
3801     if(output == 1)
3802     {
3803         cout << "(" << value[0] <> operation[i] <> value[1] <> ")" << operation[j] << value[3] << ")" << operation[k] <<
3804             value[2] << endl;
3805     }
3806     else if(output == 2)
3807     {
3808         cout << "(" << value[0] <> operation[i] <> value[1] <> ")" << operation[j] << value[3] << ")" << operation[k] <<
3809             value[2] << endl;
3810     }
3811     myFile << "(" << value[0] <> operation[i] <> value[1] <> ")" << operation[j] << value[3] << ")" << operation[k] <<
3812         value[2] << endl;
3813 }
3814
3815 if(evaluate(evaluate(value[0],evaluate(value[1],value[3],operation[j]),operation[i]),value[2],operation[k])-hasil==0)
3816 {
3817     count++;
3818     if(output == 1)
3819     {
3820         cout << "(" << value[0] <> operation[i] <> "(" << value[1] <> operation[j] <> value[3] << ")" << operation[k] <<
3821             value[2] << endl;
3822     }
3823     else if(output == 2)
3824     {
3825         myFile << "(" << value[0] <> operation[i] <> "(" << value[1] <> operation[j] <> value[3] << ")" << operation[k] <<
3826             value[2] << endl;
3827     }
3828 }
3829
3830 }
3831 if(evaluate(evaluate(value[0],value[1],operation[i]),evaluate(value[3],value[2],operation[k]),operation[j])-hasil == 0)
3832 {
3833     count++;
3834     if(output == 1)
3835     {
3836         cout << "(" << value[0] <> operation[i] <> value[1] <> ")" << operation[j] << "(" << value[3] <> operation[k] <<
3837             value[2] << ")" << endl;
3838     }
3839     else if(output == 2)
3840     {
3841         myFile << "(" << value[0] <> operation[i] <> value[1] <> ")" << operation[j] << "(" << value[3] <> operation[k] <<
3842             value[2] << ")" << endl;
3843     }
3844 }
```

```

File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TUDIT_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
3841 {
3842     myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[3] << operation[k] <<
3843     value[2] << ")" << endl;
3844 }
3845
3846 }
3847 if(evaluate(value[0],evaluate(evaluate(value[1],value[3],operation[j]),value[2],operation[k]),operation[i])-24 == 0)
3848 {
3849     count++;
3850     if(output == 1)
3851     {
3852         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] <<
3853         value[2] << ")" << endl;
3854     }
3855
3856     else if(output == 2)
3857     {
3858         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] <<
3859         value[2] << ")" << endl;
3860     }
3861 }
3862 if(evaluate(value[0],evaluate(value[1],evaluate(value[3],value[2],operation[k]),operation[j]),operation[i])-24 == 0)
3863 {
3864     count++;
3865     if(output == 1)
3866     {
3867         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[3] << operation[k] <<
3868         value[2] << ")" << endl;
3869     }
3870 }
3871 else if(output == 2)
3872 {
3873     cout << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[3] << operation[k] <<
3874     value[2] << ")" << endl;
3875 }
3876 }
3877 }
3878 //Permutasi 3:
3879 if(evaluate((evaluate(evaluate(value[0],value[2],operation[i]),value[1],operation[j]),value[3],operation[k])-hasil == 0)
3880 {
3881     count++;
3882     if(output == 1)
3883     {
3884         cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[1] << ")" << operation[k] <<
3885         value[3] << endl;
3886     }
3887
3888     else if(output == 2)
3889     {
3890         cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[1] << ")" << operation[k] <<
3891         value[3] << endl;
3892     }
3893 }
3894 if(evaluate(evaluate(value[0],evaluate(value[2],value[1],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
3895 {
3896     count++;
3897     if(output == 1)
3898     {
3899         cout << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k] <<
3900         value[3] << ")" << endl;
3901 }
3902 }
3903
3904 cout << "-----</b>

```

IF2211 Strategi Algoritma

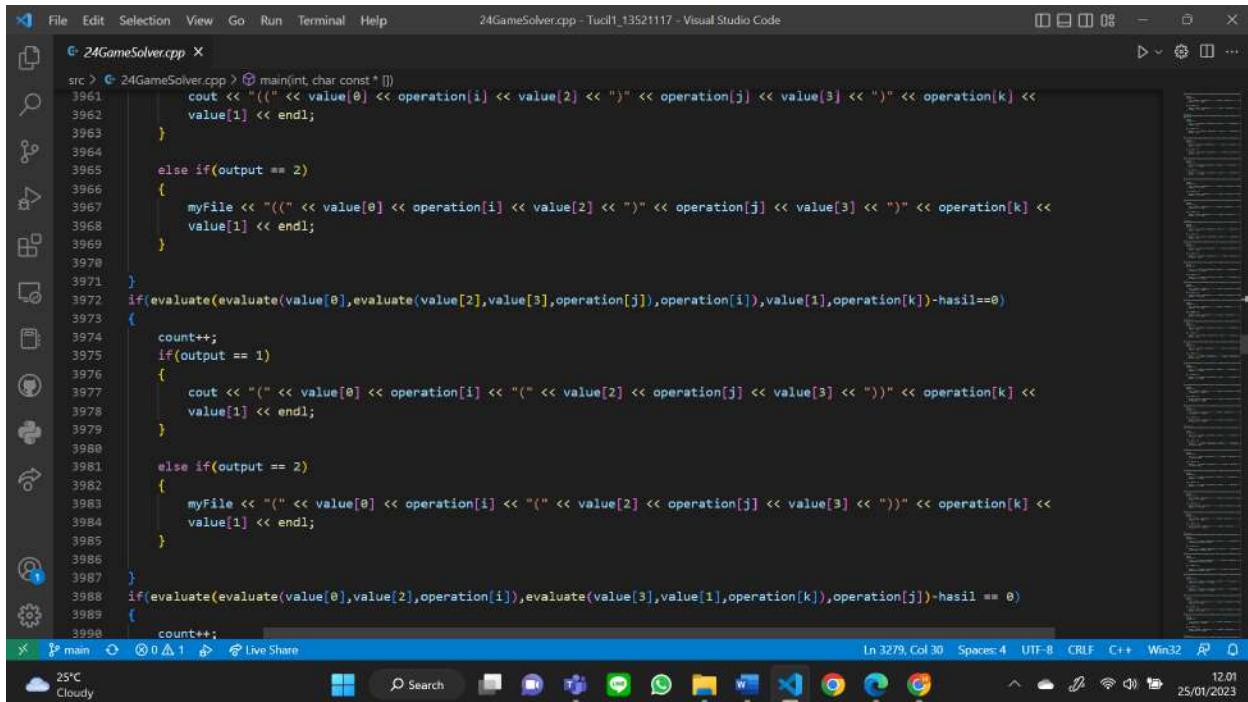


```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const *[])
3901     value[3] << endl;
3902 }
3903
3904 else if(output == 2)
3905 {
    myFile << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k]
    << value[3] << endl;
}
3908
3909
3910 }
3911 if(evaluate(evaluate(value[0],value[2],operation[i]),evaluate(value[1],value[3],operation[k]),operation[j])-hasil == 0)
3912 {
    count++;
    if(output == 1)
    {
        cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[1] << operation[k]
        << value[3] << ")" << endl;
    }
    else if(output == 2)
    {
        myFile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[1] << operation[k]
        << value[3] << ")" << endl;
    }
3925 }
3926 if(evaluate(value[0],evaluate(evaluate(value[2],value[1],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
3927 {
    count++;
    if(output == 1)
3928
3929
3930 }
```



```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const *[])
3931     cout << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k]
3932     << value[3] << ")" << endl;
3933 }
3934 else if(output == 2)
3935 {
    myFile << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k] <<
    value[3] << ")" << endl;
}
3938
3939
3940 if(evaluate(value[0],evaluate(value[2],evaluate(value[1],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
3941 {
    count++;
    if(output == 1)
    {
        cout << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[1] << operation[k] <<
        value[3] << ")" << endl;
    }
3945
3946
3947
3948 else if(output == 2)
{
    myFile << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[1] << operation[k] <<
    value[3] << ")" << endl;
}
3953
3954 //Permutasi 4
3955 if(evaluate((evaluate(evaluate(value[0],value[2],operation[i]),value[3],operation[j])),value[1],operation[k])-hasil == 0)
3956 {
    count++;
    if(output == 1)
3957
3958
3959 }
```

IF2211 Strategi Algoritma



The screenshot shows a Visual Studio Code window with the following details:

- File Path:** 24GameSolver.cpp
- Code Content:** A C++ program for solving the 24 game. The code includes nested loops and conditional statements to generate and evaluate permutations of four numbers (value[0], value[1], value[2], value[3]) using three operations (operation[i], operation[j], operation[k]). It checks if the result of the expression matches 24 and increments a counter if it does.
- Code Lines:** Lines 3961 to 3998 are visible.
- UI Elements:** The interface includes a top bar with File, Edit, Selection, View, Go, Run, Terminal, Help, and a tab bar with main.cpp, 24GameSolver.cpp, and Live Share. The bottom status bar shows line count (Ln 3279), column count (Col 30), encoding (UTF-8), and date/time (12.01 25/01/2023).

IF2211 Strategi Algoritma

```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
3991     if(output == 1)
3992     {
3993         cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[3] << operation[k] <
3994             value[1] << ")" << endl;
3995     }
3996
3997     else if(output == 2)
3998     {
3999         myFile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[3] << operation[k] <
4000             value[1] << ")" << endl;
4001     }
4002
4003 }
4004
4005 if(evaluate(value[0],evaluate(evaluate(value[2],value[3],operation[j]),value[1],operation[k]),operation[i])-24 == 0)
4006 {
4007     count++;
4008     if(output == 1)
4009     {
4010         cout << value[0] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k]
4011             << value[1] << ")" << endl;
4012     }
4013
4014     else if(output == 2)
4015     {
4016         myFile << value[0] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k]
4017             << value[1] << ")" << endl;
4018     }
4019 }
4020
4021
4022
4023
4024
4025
4026
4027
4028
4029
4030
4031
4032
4033
4034
4035
4036
4037 //Permutasi 5
4038 if(evaluate(evaluate(value[0],value[3],operation[i]),value[1],operation[j]),value[2],operation[k])-hasil == 0)
4039 {
4040
4041     count++;
4042     if(output == 1)
4043     {
4044         cout << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << value[1] << ")" << operation[k]
4045             << value[2] << endl;
4046     }
4047
4048     else if(output == 2)
4049     {
4050         myFile << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << value[1] << ")" << operation[k]
```

IF2211 Strategi Algoritma

```
24GameSolver.cpp
```

```
src > 24GameSolver.cpp > main(int, char const *[])
4851     << value[2] << endl;
4852 }
4853
4854 }
4855 if(evaluate(evaluate(value[0],evaluate(value[3],value[1],operation[j]),operation[i]),value[2],operation[k])-hasil==0)
4856 {
    count++;
    if(output == 1)
    {
        cout << "(" << value[0] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")" << operation[k]
        << value[2] << endl;
    }
    else if(output == 2)
    {
        myFile << "(" << value[0] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")" << operation[k]
        << value[2] << endl;
    }
}
4878
4879
4880 if(evaluate(evaluate(value[0],value[3],operation[i]),evaluate(value[1],value[2],operation[k]),operation[j])-hasil == 0)
4881 {
    count++;
    if(output == 1)
    {
        cout << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << "(" << value[1] << operation[k] <<
        value[2] << ")" << endl;
    }
    else if(output == 2)
```

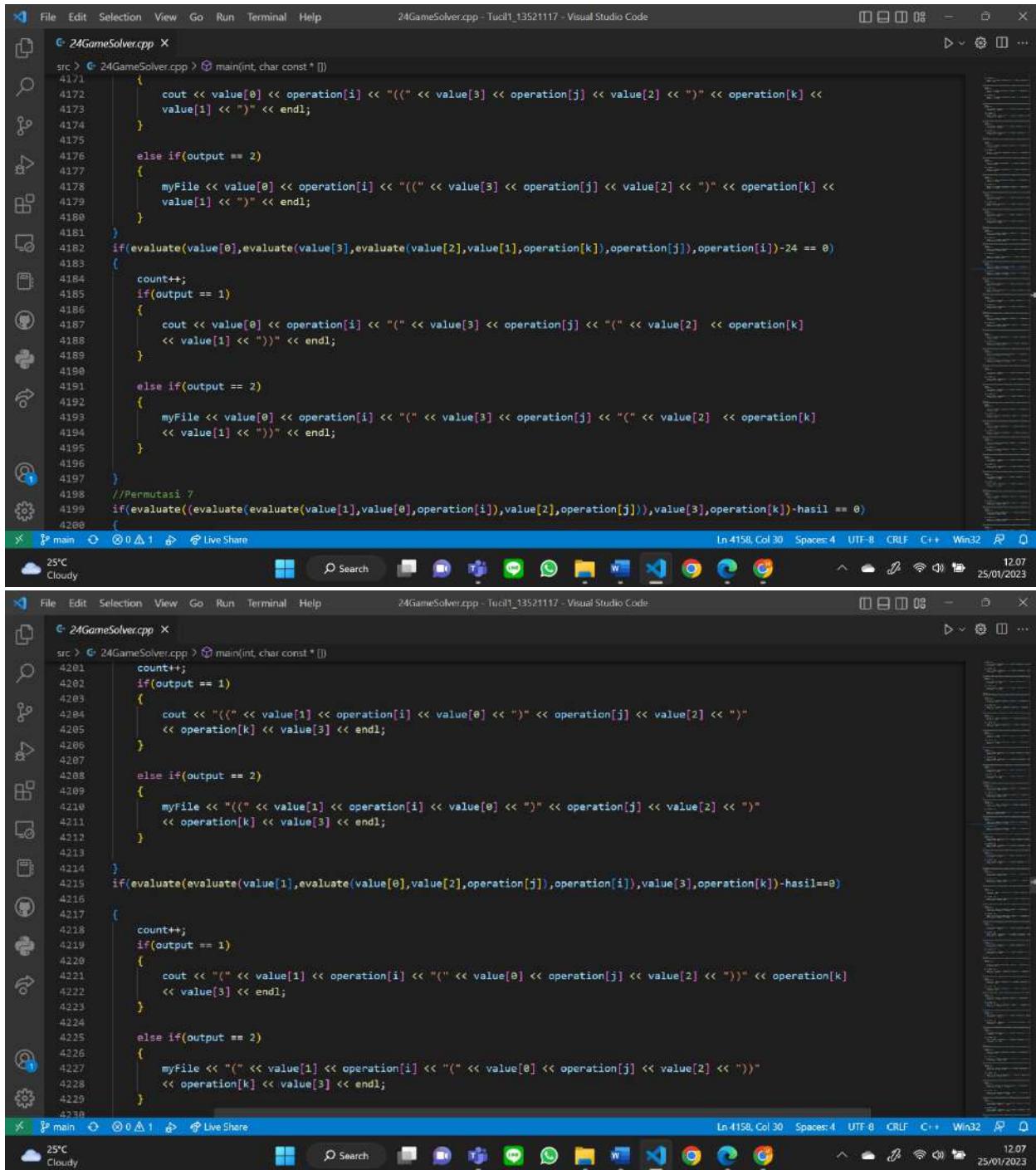
```
24GameSolver.cpp
```

```
src > 24GameSolver.cpp > main(int, char const *[])
4881 {
    myFile << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << "(" << value[1] << operation[k] <<
    value[2] << ")" << endl;
}
4883
4884
4885
4886
4887 if(evaluate(value[0],evaluate(evaluate(value[3],value[1],operation[j]),value[2],operation[k]),operation[i])-24 == 0)
4888 {
    count++;
    if(output == 1)
    {
        cout << value[0] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")" << operation[k] <<
        value[2] << ")" << endl;
    }
    else if(output == 2)
    {
        myFile << value[0] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")" << operation[k] <<
        value[2] << ")" << endl;
    }
}
4102
4103 if(evaluate(value[0],evaluate(value[3],evaluate(value[1],value[2],operation[k]),operation[j]),operation[i])-24 == 0)
4104 {
    count++;
    if(output == 1)
    {
        cout << value[0] << operation[i] << "(" << value[3] << operation[j] << "(" << value[1] << operation[k] <<
        value[2] << ")" << endl;
```

IF2211 Strategi Algoritma

```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const[])
4111
4112     else if(output == 2)
4113     {
4114         myFile << value[0] << operation[i] << "(" << value[3] << operation[j] << "(" << value[1] << operation[k]
4115         << value[2] << ")">< endl;
4116     }
4117
4118 }
4119 //Permutasi 6
4120 if(evaluate(evaluate(evaluate(value[0],value[3],operation[i]),value[2],operation[j]),value[1],operation[k])-hasil == 0)
4121 {
4122     count++;
4123     if(output == 1)
4124     {
4125         cout << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << value[2] << ")"
4126         << operation[k] << value[1] << endl;
4127     }
4128
4129     else if(output == 2)
4130     {
4131         myFile << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << value[2] << ""
4132         << operation[k] << value[1] << endl;
4133     }
4134 }
4135 if(evaluate(evaluate(value[0],evaluate(value[3],value[2],operation[j]),operation[i]),value[1],operation[k])-hasil==0)
4136 {
4137     count++;
4138     if(output == 1)
4139     {
4140         cout << "(" << value[0] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")">< endl;
4141         << operation[k] << value[1] << endl;
4142     }
4143
4144     else if(output == 2)
4145     {
4146         myFile << "(" << value[0] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")">< endl;
4147         << operation[k] << value[1] << endl;
4148     }
4149 }
4150 if(evaluate(evaluate(value[0],value[3],operation[i]),evaluate(value[2],value[1],operation[k]),operation[j])-hasil == 0)
4151 {
4152     count++;
4153     if(output == 1)
4154     {
4155         cout << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << "(" << value[2] <<
4156         operation[k] << value[1] << endl;
4157     }
4158
4159     else if(output == 2)
4160     {
4161         myFile << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << "(" << value[2] <<
4162         operation[k] << value[1] << endl;
4163     }
4164 }
4165
4166
4167 if(evaluate(value[0],evaluate(evaluate(value[3],value[2],operation[j]),value[1],operation[k]),operation[i])-24 == 0)
4168 {
4169     count++;
4170     if(output == 1)
4171     {
4172         cout << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << "(" << value[2] <<
4173         operation[k] << value[1] << ")">< endl;
4174     }
4175 }
```

IF2211 Strategi Algoritma

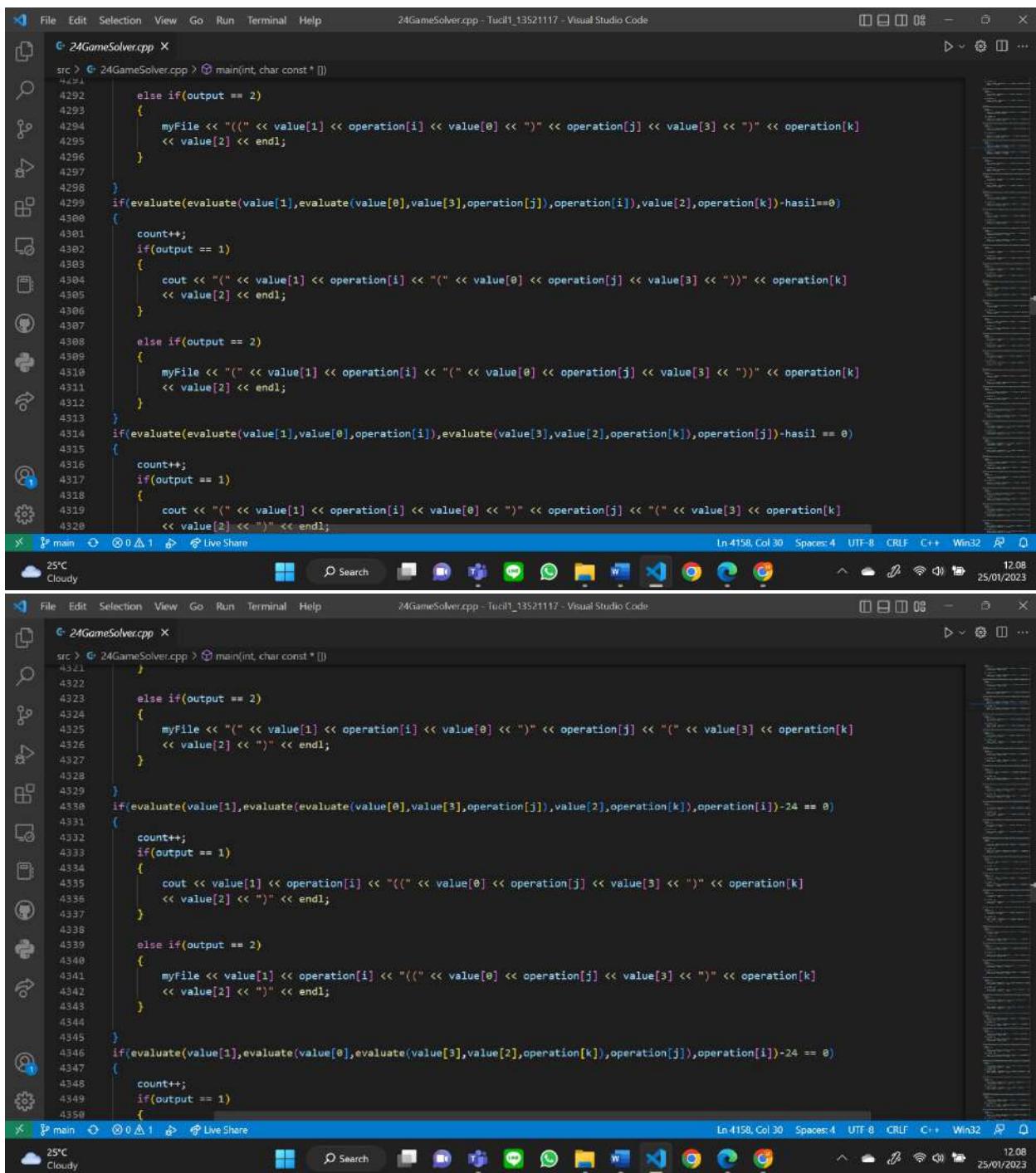


```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
4171     {
4172         cout << value[0] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")" << operation[k] <<
4173         value[1] << ")" << endl;
4174     }
4175
4176     else if(output == 2)
4177     {
4178         myFile << value[0] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")" << operation[k] <<
4179         value[1] << ")" << endl;
4180     }
4181 }
4182 if(evaluate(value[0],evaluate(value[3],evaluate(value[2],value[1],operation[k]),operation[j]),operation[i])-24 == 0)
4183 {
4184     count++;
4185     if(output == 1)
4186     {
4187         cout << value[0] << operation[i] << "(" << value[3] << operation[j] << "(" << value[2] << operation[k]
4188         << value[1] << ")" << endl;
4189     }
4190     else if(output == 2)
4191     {
4192         myFile << value[0] << operation[i] << "(" << value[3] << operation[j] << "(" << value[2] << operation[k]
4193         << value[1] << ")" << endl;
4194     }
4195 }
4196
4197 }
4198 //Permutasi 7
4199 if(evaluate(evaluate(value[1],value[0],operation[i]),value[2],operation[j]),value[3],operation[k])-hasil == 0)
4200 {
4201     count++;
4202     if(output == 1)
4203     {
4204         cout << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << value[2] << ")"
4205         << operation[k] << value[3] << endl;
4206     }
4207
4208     else if(output == 2)
4209     {
4210         myFile << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << value[2] << ")"
4211         << operation[k] << value[3] << endl;
4212     }
4213
4214 }
4215 if(evaluate(evaluate(value[1],evaluate(value[0],value[2],operation[j],operation[i]),value[3],operation[k])-hasil==0)
4216 {
4217
4218     count++;
4219     if(output == 1)
4220     {
4221         cout << "(" << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")" << operation[k]
4222         << value[3] << endl;
4223     }
4224
4225     else if(output == 2)
4226     {
4227         myFile << "(" << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")" <<
4228         << operation[k] << value[3] << endl;
4229     }
4230 }
```

IF2211 Strategi Algoritma

```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const*[])
4231     if(evaluate(evaluate(value[1],value[0],operation[1]),evaluate(value[2],value[3],operation[k]),operation[j])-hasil == 0)
4232     {
4233         count++;
4234         if(output == 1)
4235         {
4236             cout << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << "(" << value[2]
4237             << operation[k] << value[3] << ")" << endl;
4238         }
4239     }
4240
4241     else if(output == 2)
4242     {
4243         myFile << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << "(" << value[2]
4244             << operation[k] << value[3] << ")" << endl;
4245     }
4246
4247 }
4248 if(evaluate(value[1],evaluate(evaluate(value[0],value[2],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
4249 {
4250     count++;
4251     if(output == 1)
4252     {
4253         cout << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")" << operation[k]
4254             << value[3] << ")" << endl;
4255     }
4256
4257     else if(output == 2)
4258     {
4259         myFile << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")" << operation[k]
4260             << endl;
4261     }
4262 }
4263
4264 if(evaluate(value[1],evaluate(value[0],evaluate(value[2],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
4265 {
4266     count++;
4267     if(output == 1)
4268     {
4269         cout << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[2] << operation[k]
4270             << value[3] << ")" << endl;
4271     }
4272
4273     else if(output == 2)
4274     {
4275         myFile << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[2] << operation[k]
4276             << value[3] << ")" << endl;
4277     }
4278
4279 }
4280 //Permutasi 8
4281 if(evaluate((evaluate(evaluate(value[1],value[0],operation[i]),value[3],operation[j])),value[2],operation[k])-hasil == 0)
4282 {
4283     count++;
4284     if(output == 1)
4285     {
4286         cout << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << value[3] << ")" << operation[k]
4287             << value[2] << endl;
4288     }
4289
4290 }
```

IF2211 Strategi Algoritma

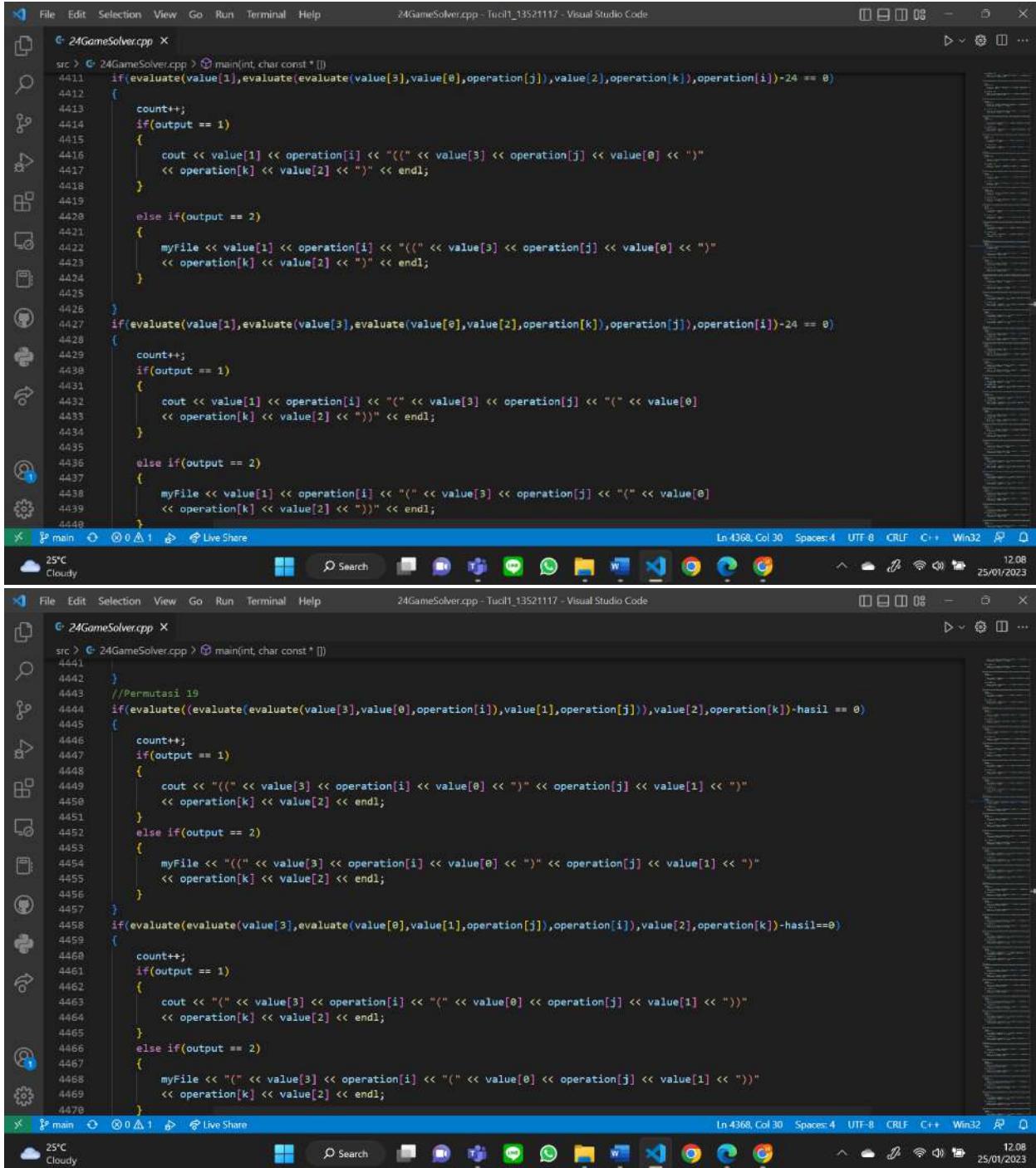


```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const *[])
4291
4292     else if(output == 2)
4293     {
4294         myFile << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << value[3] << ")" << operation[k]
4295         << value[2] << endl;
4296     }
4297
4298 }
4299 if(evaluate(evaluate(value[1],evaluate(value[0],value[3],operation[j]),operation[i]),value[2],operation[k])-hasil==0)
4300 {
4301     count++;
4302     if(output == 1)
4303     {
4304         cout << "(" << value[1] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")" << operation[k]
4305         << value[2] << endl;
4306     }
4307
4308     else if(output == 2)
4309     {
4310         myFile << "(" << value[1] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")" << operation[k]
4311         << value[2] << endl;
4312     }
4313 }
4314 if(evaluate(evaluate(value[1],value[0],operation[i]),evaluate(value[3],value[2],operation[k]),operation[j])-hasil == 0)
4315 {
4316     count++;
4317     if(output == 1)
4318     {
4319         cout << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << "(" << value[3] << operation[k]
4320         << value[2] << ")" << endl;
4321 }
4322
4323     else if(output == 2)
4324     {
4325         myFile << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << "(" << value[3] << operation[k]
4326         << value[2] << ")" << endl;
4327 }
4328
4329 }
4330 if(evaluate(value[1],evaluate(evaluate(value[0],value[3],operation[j]),value[2],operation[k]),operation[i])-24 == 0)
4331 {
4332     count++;
4333     if(output == 1)
4334     {
4335         cout << value[1] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")" << operation[k]
4336         << value[2] << ")" << endl;
4337 }
4338
4339     else if(output == 2)
4340     {
4341         myFile << value[1] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")" << operation[k]
4342         << value[2] << ")" << endl;
4343 }
4344
4345 }
4346 if(evaluate(value[1],evaluate(value[0],evaluate(value[3],value[2],operation[k]),operation[j]),operation[i])-24 == 0)
4347 {
4348     count++;
4349     if(output == 1)
4350     {
```

IF2211 Strategi Algoritma

```
src > 24GameSolver.cpp > main(int, char const *[])
4351     cout << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[3] << operation[k]
4352     << value[2] << ")"")" << endl;
4353 }
4354
4355 else if(output == 2)
4356 {
    myFile << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[3] << operation[k]
4357     << value[2] << ")"")" << endl;
4358 }
4359
4360 //Permutasi 12
4361 if(evaluate((evaluate(evaluate(value[1],value[3],operation[i]),value[0],operation[j]),value[2],operation[k])-hasil == 0)
4362 {
    count++;
    if(output == 1)
    {
        cout << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << value[0] << ")" << operation[k]
4363     << value[2] << endl;
4364 }
4365
4366 else if(output == 2)
{
    myFile << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << value[0] << ")" << endl;
4367 }
4368
4369 if(evaluate(evaluate(value[1],evaluate(value[3],value[0],operation[j],operation[i]),value[2],operation[k])-hasil==0)
4370 {
    count++;
    if(output == 1)
    {
        cout << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << value[0] << ")" << endl;
4371     << operation[k] << value[2] << endl;
4372 }
4373
4374 else if(output == 2)
{
    myFile << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << value[0] << ")" << endl;
4375     << operation[k] << value[2] << endl;
4376 }
4377
4378 }
4379 if(evaluate(evaluate(value[1],evaluate(value[3],value[0],operation[j],operation[i]),value[2],operation[k])-hasil==0)
4380 {
    count++;
    if(output == 1)
    {
        cout << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << value[0] << ")" << endl;
4381     << operation[k] << value[2] << endl;
4382 }
4383
4384 else if(output == 2)
{
    myFile << "(" << value[1] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")"")
4385     << operation[k] << value[2] << endl;
4386 }
4387
4388
4389 //Permutasi 12
4390 if(evaluate(evaluate(value[1],value[3],operation[i]),evaluate(value[0],value[2],operation[k]),operation[j])-hasil == 0)
4391 {
    count++;
    if(output == 1)
    {
        cout << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << "(" << value[0]
4392     << operation[k] << value[2] << ")"")" << endl;
4393 }
4394
4395 if(evaluate(evaluate(value[1],value[3],operation[i]),evaluate(value[0],value[2],operation[k]),operation[j])-hasil == 0)
4396 {
    count++;
    if(output == 1)
    {
        cout << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << "(" << value[0]
4397     << operation[k] << value[2] << ")"")" << endl;
4398 }
4399
4400 else if(output == 2)
{
    myFile << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << "(" << value[0]
4401     << operation[k] << value[2] << ")"")" << endl;
4402 }
4403
4404 else if(output == 2)
{
    myFile << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << "(" << value[0]
4405     << operation[k] << value[2] << ")"")" << endl;
4406 }
```

IF2211 Strategi Algoritma



```

File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - Tucll_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const[])
4411     if(evaluate(value[1],evaluate(evaluate(value[3],value[0],operation[i]),value[2],operation[j]),value[3])-24 == 0)
4412     {
4413         count++;
4414         if(output == 1)
4415         {
4416             cout << value[1] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")"
4417             << operation[k] << value[2] << ")" << endl;
4418         }
4419
4420         else if(output == 2)
4421         {
4422             myFile << value[1] << operation[i] << "(" << value[3] << operation[j] << value[0] << ""
4423             << operation[k] << value[2] << ")" << endl;
4424         }
4425
4426     }
4427     if(evaluate(value[1],evaluate(value[3],evaluate(value[0],value[2],operation[k]),operation[j]),operation[i])-24 == 0)
4428     {
4429         count++;
4430         if(output == 1)
4431         {
4432             cout << value[1] << operation[i] << "(" << value[3] << operation[j] << "(" << value[0]
4433             << operation[k] << value[2] << ")" << endl;
4434         }
4435
4436         else if(output == 2)
4437         {
4438             myFile << value[1] << operation[i] << "(" << value[3] << operation[j] << "(" << value[0]
4439             << operation[k] << value[2] << ")" << endl;
4440         }
4441     }
4442 }
4443 //Permutasi 19
4444 if(evaluate(evaluate(value[3],value[0],operation[i]),value[1],operation[j]),value[2],operation[k])-hasil == 0)
4445 {
4446     count++;
4447     if(output == 1)
4448     {
4449         cout << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << value[1] << ")"
4450         << operation[k] << value[2] << endl;
4451     }
4452     else if(output == 2)
4453     {
4454         myFile << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << value[1] << ""
4455         << operation[k] << value[2] << endl;
4456     }
4457 }
4458 if(evaluate(evaluate(value[3],evaluate(value[0],value[1],operation[j]),operation[i]),value[2],operation[k])-hasil==0)
4459 {
4460     count++;
4461     if(output == 1)
4462     {
4463         cout << "(" << value[3] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
4464         << operation[k] << value[2] << endl;
4465     }
4466     else if(output == 2)
4467     {
4468         myFile << "(" << value[3] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
4469         << operation[k] << value[2] << endl;
4470     }
4471 }
4472

```

IF2211 Strategi Algoritma

```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - Tuclit_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
4471
4472 }
4473 if(evaluate(evaluate(value[3],value[0],operation[i]),evaluate(value[1],value[2],operation[k]),operation[j])-hasil == 0)
4474 {
4475     count++;
4476     if(output == 1)
4477     {
4478         cout << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << "(" << value[1]
4479             << operation[k] << value[2] << ")" << endl;
4480     }
4481     else if(output == 2)
4482     {
4483         myFile << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << "(" << value[1]
4484             << operation[k] << value[2] << ")" << endl;
4485     }
4486 }
4487
4488 if(evaluate(value[3],evaluate(evaluate(value[0],value[1],operation[j]),value[2],operation[k]),operation[i])-24 == 0)
4489 {
4490     count++;
4491     if(output == 1)
4492     {
4493         cout << value[3] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
4494             << operation[k] << value[2] << ")" << endl;
4495     }
4496     else if(output == 2)
4497     {
4498         myFile << value[3] << operation[i] << "(" << value[0] << operation[j] << value[1] << "
4499             << operation[k] << value[2] << ")" << endl;
4500     }
4501
4502 }
4503 if(evaluate(value[3],evaluate(value[0],evaluate(value[1],value[2],operation[k]),operation[j]),operation[i])-24 == 0)
4504 {
4505     count++;
4506     if(output == 1)
4507     {
4508         cout << value[3] << operation[i] << "(" << value[0] << operation[j] << "(" << value[1]
4509             << operation[k] << value[2] << ")" << endl;
4510     }
4511     else if(output == 2)
4512     {
4513         myFile << value[3] << operation[i] << "(" << value[0] << operation[j] << "(" << value[1]
4514             << operation[k] << value[2] << ")" << endl;
4515     }
4516
4517 }
4518 //Permutasi 20
4519 if(evaluate((evaluate(evaluate(value[3],value[0],operation[i]),value[2],operation[j]),value[1],operation[k])-hasil == 0)
4520 {
4521     count++;
4522     if(output == 1)
4523     {
4524         cout << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << value[2] << ")"
4525             << operation[k] << value[1] << endl;
4526     }
4527     else if(output == 2)
4528     {
4529         myFile << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << value[2] << ")"
4530             << operation[k] << value[1] << endl;
4531
4532 }
4533
4534
4535
4536
4537
4538
```

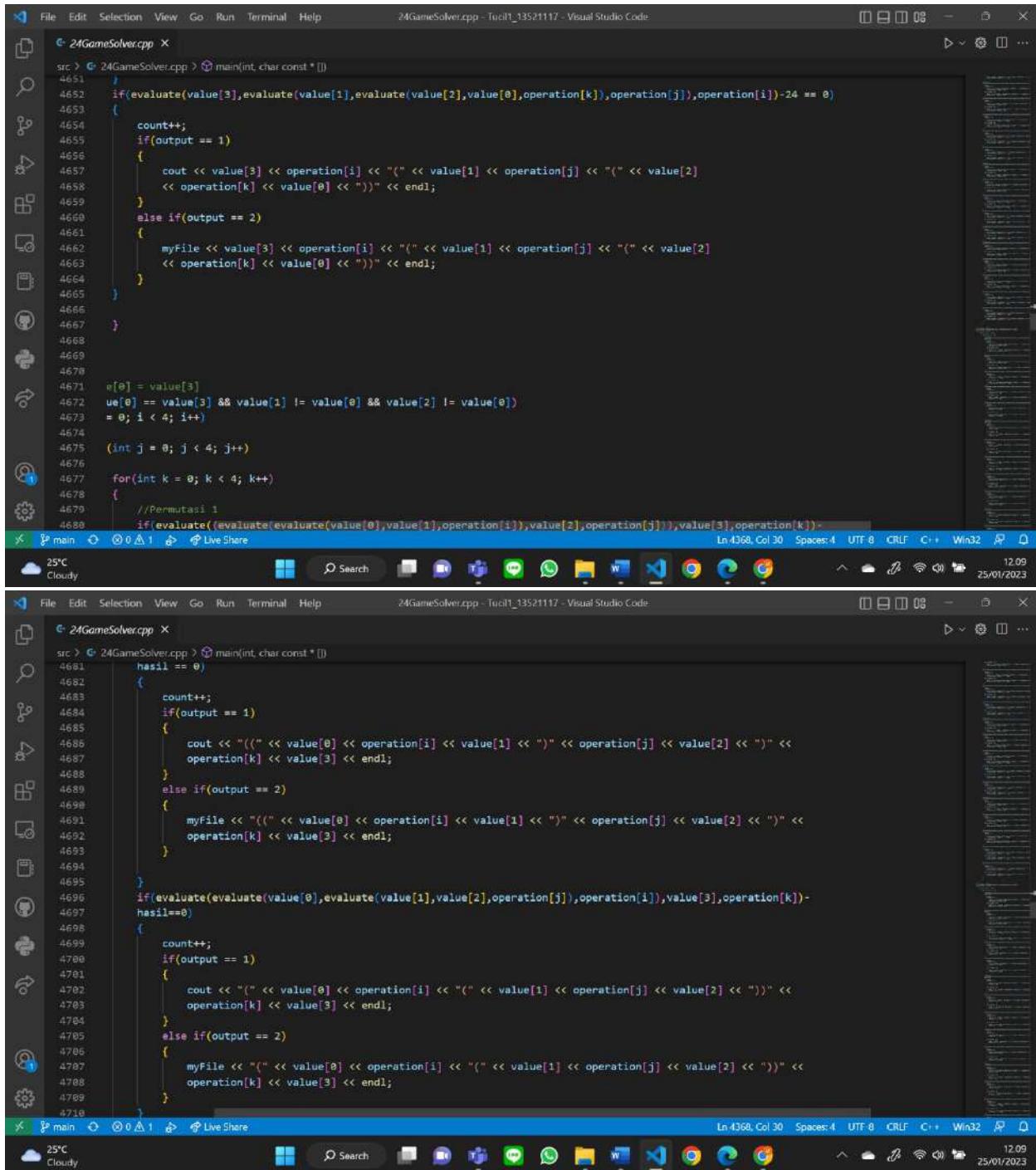
IF2211 Strategi Algoritma

```
src > 24GameSolver.cpp > main(int, char const *[])
4531     }
4532 }
4533 if(evaluate(evaluate(value[3],evaluate(value[0],value[2],operation[j]),operation[i]),value[1],operation[k])-hasil==0)
{
    count++;
    if(output == 1)
    {
        cout << "(" << value[3] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")"
        << operation[k] << value[1] << endl;
    }
    else if(output == 2)
    {
        myFile << "(" << value[3] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")"
        << operation[k] << value[1] << endl;
    }
}
4546
4547 }
4548 if(evaluate(evaluate(value[3],value[0],operation[i]),evaluate(value[2],value[1],operation[k]),operation[j])-hasil == 0)
4549 {
    count++;
    if(output == 1)
    {
        cout << "(" << value[3] << operation[i] << value[0] << ")"
        << operation[j] << "(" << value[2]
        << operation[k] << value[1] << endl;
    }
    else if(output == 2)
    {
        myFile << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << "(" << value[2]
        << operation[k] << value[1] << ")" << endl;
    }
}
4558
4559
4560
4561
4562 if(evaluate(value[3],evaluate(evaluate(value[0],value[2],operation[j]),value[1],operation[k]),operation[i])-24 == 0)
4563 {
    count++;
    if(output == 1)
    {
        cout << value[3] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")"
        << operation[k] << value[1] << ")" << endl;
    }
    else if(output == 2)
    {
        myFile << value[3] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")"
        << operation[k] << value[1] << ")" << endl;
    }
}
4576
4577 if(evaluate(value[3],evaluate(value[0],evaluate(value[2],value[1],operation[k]),operation[j]),operation[i])-24 == 0)
4578 {
    count++;
    if(output == 1)
    {
        cout << value[3] << operation[i] << "(" << value[0] << operation[j] << "(" << value[2]
        << operation[k] << value[1] << ")" << endl;
    }
    else if(output == 2)
    {
        myFile << value[3] << operation[i] << "(" << value[0] << operation[j] << "(" << value[2]
        << operation[k] << value[1] << ")" << endl;
    }
}
4585
4586
4587
4588
4589 }
```

IF2211 Strategi Algoritma

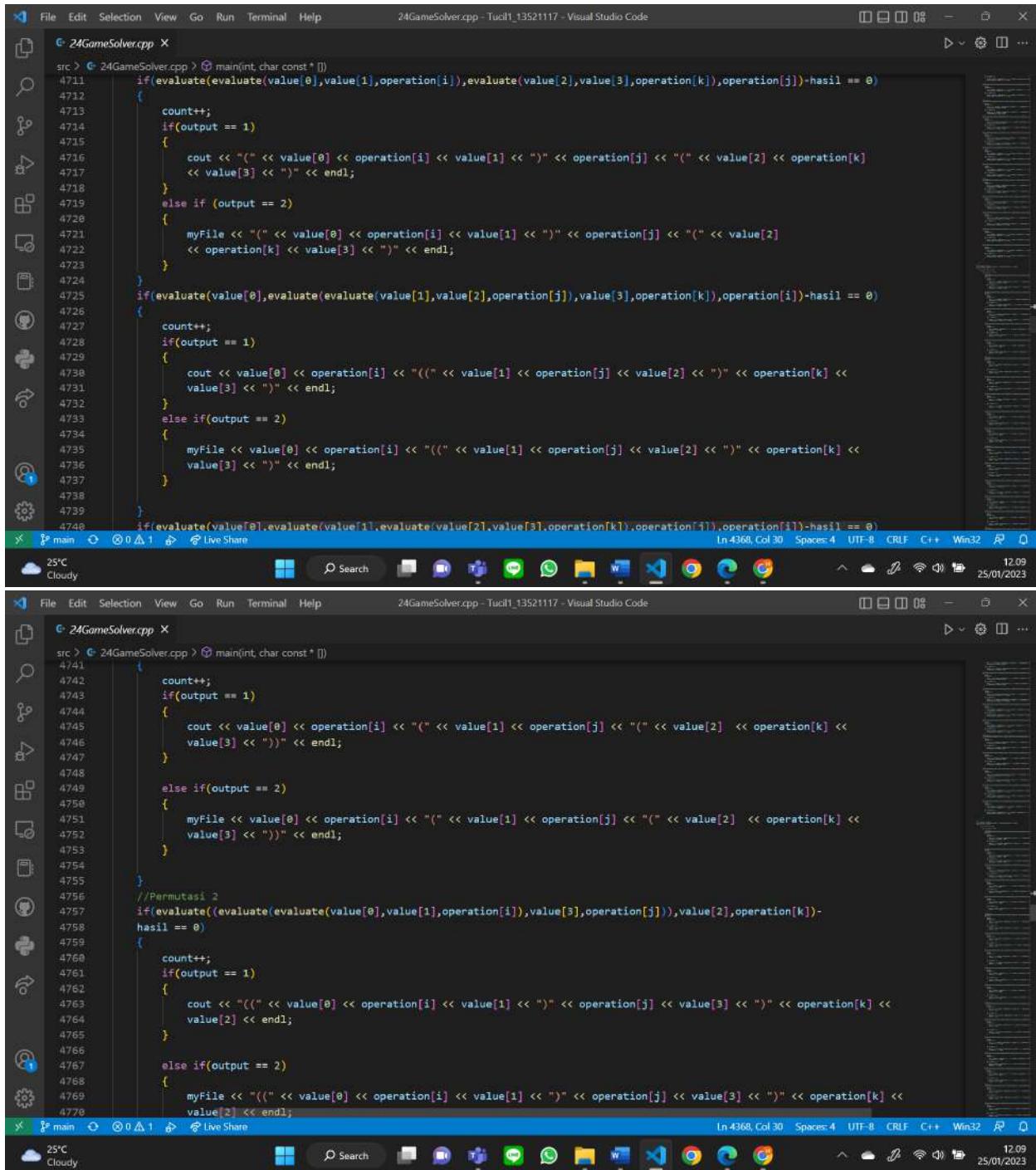
```
src > 24GameSolver.cpp > main(int, char const *[])
4591 //Permutasi 21
4592 if(evaluate(evaluate(value[3],value[1],operation[i]),value[2],operation[j]),value[0],operation[k]-hasil == 0)
4593 {
4594     count++;
4595     if(output == 1)
4596     {
4597         cout << "(" << value[3] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")"
4598         << operation[k] << value[0] << endl;
4599     }
4600     else if(output == 2)
4601     {
4602         myFile << "(" << value[3] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")"
4603         << operation[k] << value[0] << endl;
4604     }
4605
4606 }
4607 if(evaluate(evaluate(value[3],evaluate(value[1],value[2],operation[j]),operation[i]),value[0],operation[k])-hasil==0)
4608 {
4609     count++;
4610     if(output == 1)
4611     {
4612         cout << "(" << value[3] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")"
4613         << operation[k] << value[0] << endl;
4614     }
4615     else if(output == 2)
4616     {
4617         myFile << "(" << value[3] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")"
4618         << operation[k] << value[0] << endl;
4619     }
4620
4621 if(evaluate(evaluate(value[3],value[1],operation[i]),evaluate(value[2],value[0],operation[k]),operation[j])-hasil == 0)
4622 {
4623     count++;
4624     if(output == 1)
4625     {
4626         cout << "(" << value[3] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2]
4627         << operation[k] << value[0] << ")" << endl;
4628     }
4629     else if(output == 2)
4630     {
4631         myFile << "(" << value[3] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2]
4632         << operation[k] << value[0] << ")" << endl;
4633     }
4634
4635 }
4636 if(evaluate(value[3],evaluate(evaluate(value[1],value[2],operation[j]),value[0],operation[k]),operation[i])-24 == 0)
4637 {
4638     count++;
4639     if(output == 1)
4640     {
4641         cout << value[3] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")"
4642         << operation[k] << value[0] << ")" << endl;
4643     }
4644     else if(output == 2)
4645     {
4646         myFile << value[3] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")"
4647         << operation[k] << value[0] << ")" << endl;
4648     }
4649 }
```

IF2211 Strategi Algoritma



```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const *[])
4651
4652     if(evaluate(value[3],evaluate(value[1],evaluate(value[2],value[0],operation[k]),operation[j]),operation[i])-24 == 0)
4653     {
4654         count++;
4655         if(output == 1)
4656         {
4657             cout << value[3] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2]
4658             << operation[k] << value[0] << ")" ) << endl;
4659         }
4660         else if(output == 2)
4661         {
4662             myFile << value[3] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2]
4663             << operation[k] << value[0] << ")" ) << endl;
4664         }
4665     }
4666
4667 }
4668
4669
4670
4671     e[0] = value[3];
4672     if(e[0] == value[3] && value[1] != value[0] && value[2] != value[0])
4673     {
4674         o[0] = value[3];
4675         for(j = 0; j < 4; j++)
4676         {
4677             for(k = 0; k < 4; k++)
4678             {
4679                 //Permutasi 1
4680                 if(evaluate(evaluate(value[0],value[1],operation[i]),value[2],operation[j]),value[3],operation[k])-
4681                     hasil == 0)
4682                     {
4683                         count++;
4684                         if(output == 1)
4685                         {
4686                             cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")" <<
4687                             operation[k] << value[3] << endl;
4688                         }
4689                         else if(output == 2)
4690                         {
4691                             myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")" <<
4692                             operation[k] << value[3] << endl;
4693                         }
4694                     }
4695     }
4696     if(evaluate(evaluate(value[0],evaluate(value[1],value[2],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
4697     {
4698         count++;
4699         if(output == 1)
4700         {
4701             cout << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" ) <<
4702             operation[k] << value[3] << endl;
4703         }
4704         else if(output == 2)
4705         {
4706             myFile << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" ) <<
4707             operation[k] << value[3] << endl;
4708         }
4709     }
4710 }
```

IF2211 Strategi Algoritma



```
src > 24GameSolver.cpp > main(int, char const *[])
4711     if(evaluate(evaluate(value[0],value[1],operation[i]),evaluate(value[2],value[3],operation[k]),operation[j])-hasil == 0)
4712     {
4713         count++;
4714         if(output == 1)
4715         {
4716             cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2] << operation[k]
4717             << value[3] << ")" << endl;
4718         }
4719         else if (output == 2)
4720         {
4721             myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2]
4722             << operation[k] << value[3] << ")" << endl;
4723         }
4724     }
4725     if(evaluate(value[0],evaluate(evaluate(value[1],value[2],operation[j]),value[3],operation[k]),operation[i])-hasil == 0)
4726     {
4727         count++;
4728         if(output == 1)
4729         {
4730             cout << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")"
4731             << value[3] << ")" << endl;
4732         }
4733         else if(output == 2)
4734         {
4735             myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")"
4736             << operation[k] << value[3] << ")" << endl;
4737         }
4738     }
4739 }
4740 if(evaluate(value[0],evaluate(value[1],evaluate(value[2],value[3],operation[k]),operation[j]),operation[i])-hasil == 0)
4741 {
    count++;
    if(output == 1)
    {
        cout << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2] << operation[k] <<
        value[3] << ")" << endl;
    }
    else if(output == 2)
    {
        myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2] << operation[k] <<
        value[3] << ")" << endl;
    }
}
//Permutasi 2
4757 if(evaluate(evaluate(evaluate(value[0],value[1],operation[i]),value[3],operation[j]),value[2],operation[k])-hasil == 0)
4758 {
    count++;
    if(output == 1)
    {
        cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[3] << ")" << operation[k] <<
        value[2] << endl;
    }
    else if(output == 2)
    {
        myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[3] << ")" << operation[k] <<
        value[2] << endl;
    }
}
```

IF2211 Strategi Algoritma

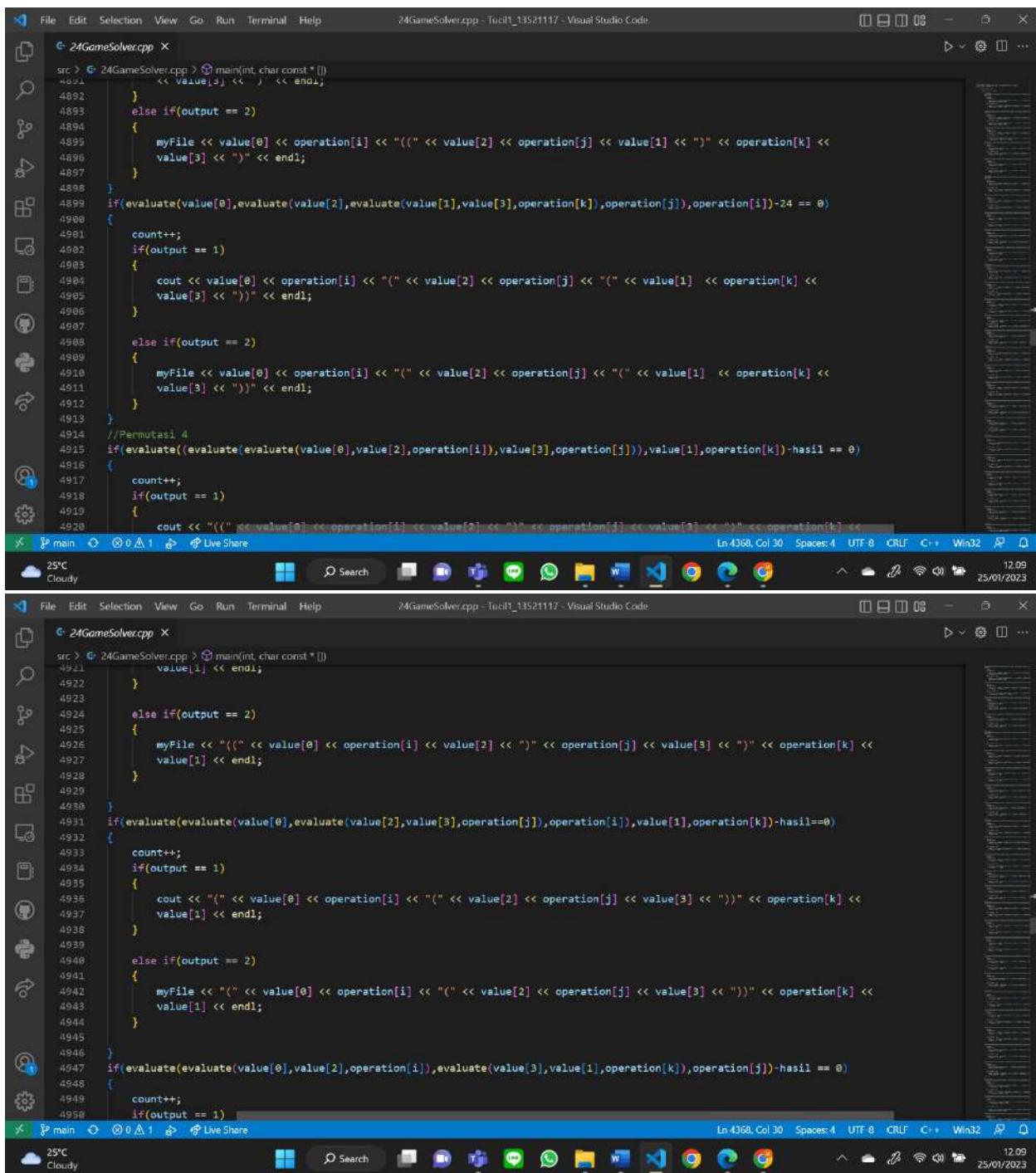
```
src > 24GameSolver.cpp > main(int, char const[])
4771     }
4772 
4773 }
4774 if(evaluate(evaluate(value[0],evaluate(value[1],value[3],operation[j]),operation[i]),value[2],operation[k])-hasil==0)
4775 {
4776     count++;
4777     if(output == 1)
4778     {
4779         cout << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] <<
4780         value[2] << endl;
4781     }
4782 
4783     else if(output == 2)
4784     {
4785         myFile << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] <<
4786         value[2] << endl;
4787     }
4788 }
4789 if(evaluate(evaluate(value[0],value[1],operation[i]),evaluate(value[3],value[2],operation[k]),operation[j])-hasil == 0)
4790 {
4791     count++;
4792     if(output == 1)
4793     {
4794         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[3] << operation[k] <<
4795         value[2] << ")" << endl;
4796     }
4797 
4798     else if(output == 2)
4799     {
4800         myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[3] << operation[k] <<
4801         value[2] << ")" << endl;
4802     }
4803 }
4804 if(evaluate(value[0],evaluate(evaluate(value[1],value[3],operation[j]),value[2],operation[k]),operation[i])-24 == 0)
4805 {
4806     cout << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] <<
4807     value[2] << ")" << endl;
4808 }
4809 
4810 if(evaluate(value[0],evaluate(evaluate(value[1],value[3],operation[j]),value[2],operation[k]),operation[i])-24 == 0)
4811 {
4812     count++;
4813     if(output == 1)
4814     {
4815         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] <<
4816         value[2] << ")" << endl;
4817 }
4818 
4819 else if(output == 2)
4820 {
4821     myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] <<
4822     value[2] << ")" << endl;
4823 }
4824 
4825 if(evaluate(value[0],evaluate(value[1],evaluate(value[3],value[2],operation[k]),operation[j]),operation[i])-24 == 0)
4826 {
4827     count++;
4828     if(output == 1)
4829     {
4830         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[3] << operation[k] <<
4831         value[2] << ")" << endl;
4832     }
4833 }
```

```

src > 24GameSolver.cpp > main(int, char const *[])
4831     else if(output == 2)
4832     {
4833         myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[3] << operation[k] <<
4834             value[2] << ")" << endl;
4835     }
4836 }
4837
4838 //Permutasi 3
4839 if(evaluate(evaluate(evaluate(value[0],value[2],operation[i]),value[1],operation[j]),value[3],operation[k])-hasil == 0)
4840 {
4841     count++;
4842     if(output == 1)
4843     {
4844         cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[1] << ")" << operation[k] <<
4845             value[3] << endl;
4846     }
4847
4848     else if(output == 2)
4849     {
4850         myFile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[1] << ")" << operation[k] <<
4851             value[3] << endl;
4852     }
4853 }
4854 if(evaluate(evaluate(value[0],evaluate(value[2],value[1],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
4855 {
4856     count++;
4857     if(output == 1)
4858     {
4859         cout << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k] <<
4860             value[3] << endl;
4861     }
4862 }
4863
4864 else if(output == 2)
4865 {
4866     myFile << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k]
4867         << value[3] << endl;
4868 }
4869
4870 if(evaluate(evaluate(value[0],value[2],operation[i]),evaluate(value[1],value[3],operation[k]),operation[j])-hasil == 0)
4871 {
4872     count++;
4873     if(output == 1)
4874     {
4875         cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[1] << operation[k]
4876             << value[3] << ")" << endl;
4877     }
4878
4879     else if(output == 2)
4880     {
4881         myFile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[1] << operation[k]
4882             << value[3] << ")" << endl;
4883     }
4884 }
4885 if(evaluate(value[0],evaluate(evaluate(value[2],value[1],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
4886 {
4887     count++;
4888     if(output == 1)
4889     {
4890         cout << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k]
4891     }
4892 }
4893
4894
4895
4896
4897
4898

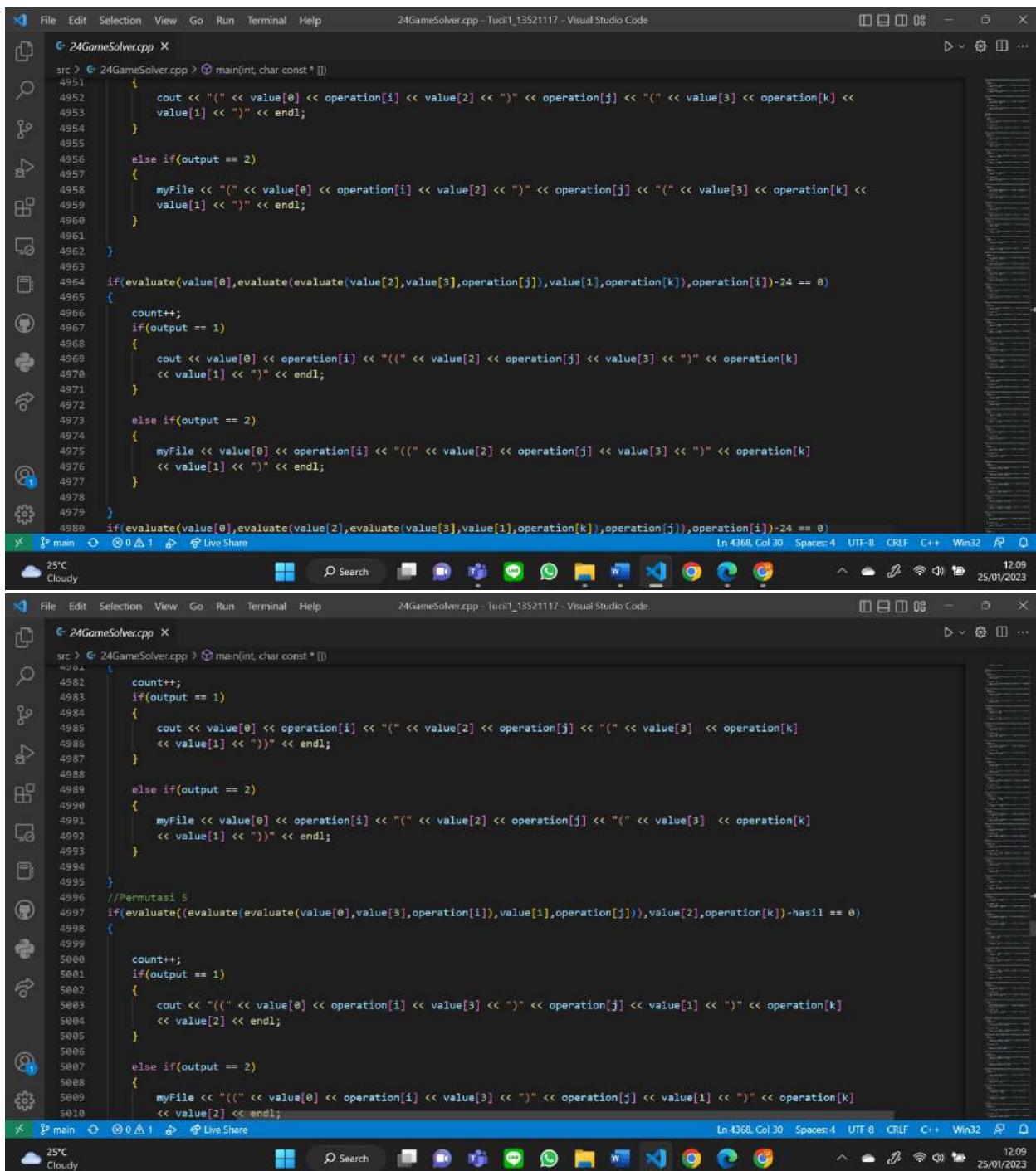
```

IF2211 Strategi Algoritma



```
24GameSolver.cpp // 24GameSolver.cpp - Tuclit_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
4991     << value[3] << endl;
4992 }
4993 else if(output == 2)
4994 {
    myFile << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k] <<
4995     value[3] << ")" << endl;
4996 }
4997 }
4998 }
4999 if(evaluate(value[0],evaluate(value[2],evaluate(value[1],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
5000 {
    count++;
5001     if(output == 1)
5002     {
        cout << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[1] << operation[k] <<
5003         value[3] << ")" << endl;
5004     }
5005     else if(output == 2)
5006     {
        myFile << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[1] << operation[k] <<
5007         value[3] << ")" << endl;
5008     }
5009 }
5010 //Permutasi 4
5011 if(evaluate(evaluate(value[0],value[2],operation[i]),value[3],operation[j]),value[1],operation[k])-hasil == 0)
5012 {
    count++;
5013     if(output == 1)
5014     {
        cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[3] << ")" << operation[k] <<
5015         value[1] << endl;
5016 }
5017 }
5018 }
5019 if(evaluate(evaluate(value[0],evaluate(value[2],value[3],operation[j],operation[i]),value[1],operation[k])-hasil==0)
5020 {
    count++;
5021     if(output == 1)
5022     {
        cout << value[1] << endl;
5023 }
5024     else if(output == 2)
5025     {
        myFile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[3] << ")" << operation[k] <<
5026         value[1] << endl;
5027 }
5028 }
5029 }
5030 if(evaluate(evaluate(value[0],evaluate(value[2],value[3],operation[j],operation[i]),value[1],operation[k])-hasil==0)
5031 {
    count++;
5032     if(output == 1)
5033     {
        cout << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << ")" << operation[k] <<
5034         value[1] << endl;
5035 }
5036     else if(output == 2)
5037     {
        myFile << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << ")" << operation[k] <<
5038         value[1] << endl;
5039 }
5040 }
5041 if(evaluate(evaluate(value[0],value[2],operation[i]),evaluate(value[3],value[1],operation[k]),operation[j])-hasil == 0)
5042 {
    count++;
5043     if(output == 1)
5044     {
        cout << value[1] << endl;
5045 }
5046 }
```

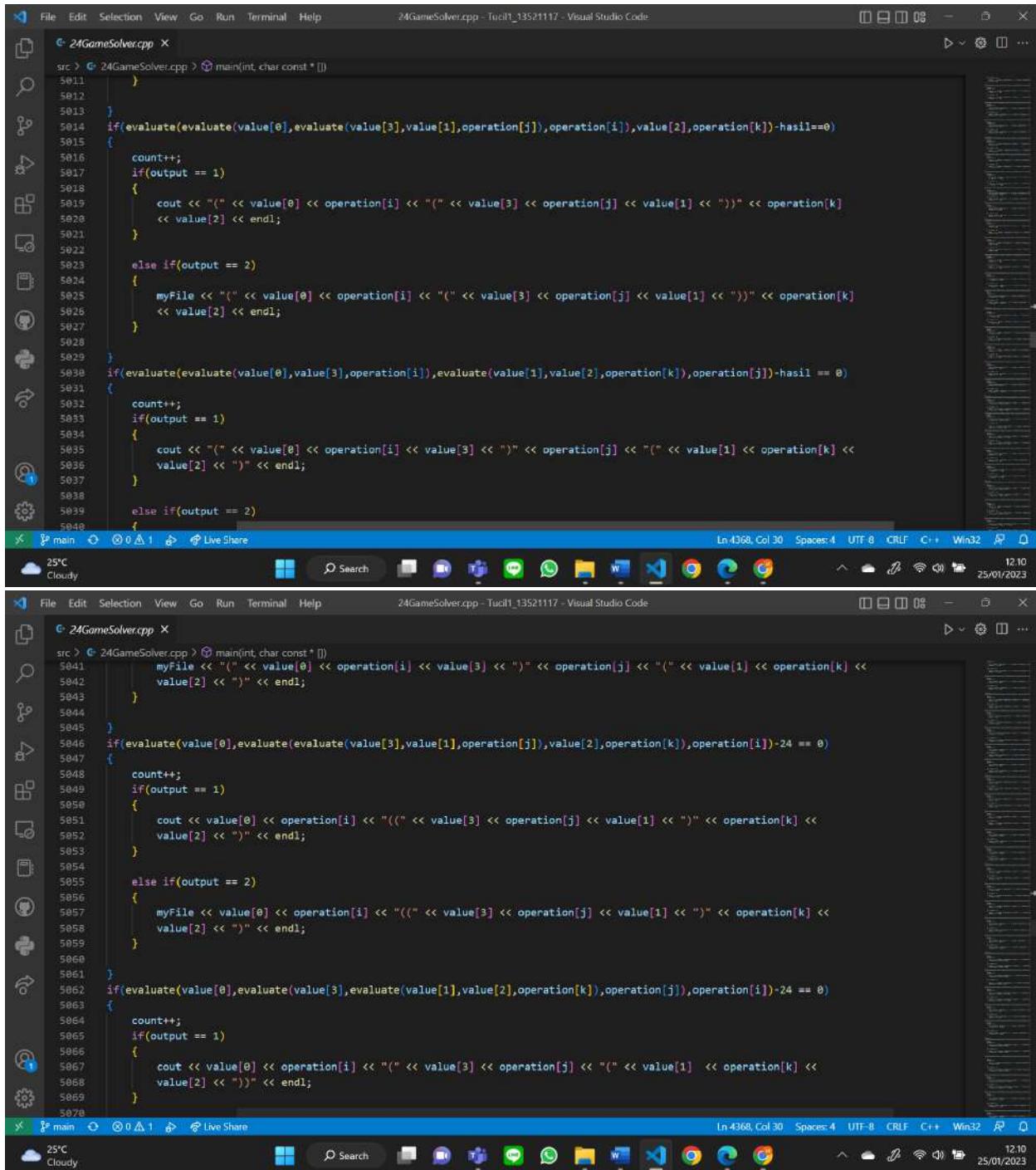
IF2211 Strategi Algoritma



```
24GameSolver.cpp
```

```
src > 24GameSolver.cpp > main(int, char const *[])
4951 {
4952     cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[3] << operation[k] <<
4953     value[1] << ")".<< endl;
4954 }
4955
4956 else if(output == 2)
4957 {
4958     myFile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[3] << operation[k] <<
4959     value[1] << ")".<< endl;
4960 }
4961
4962
4963
4964 if(evaluate(value[0],evaluate(evaluate(value[2],value[3],operation[j]),value[1],operation[k]),operation[i])-24 == 0)
4965 {
4966     count++;
4967     if(output == 1)
4968     {
4969         cout << value[0] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k]
4970         << value[1] << ")".<< endl;
4971     }
4972
4973 else if(output == 2)
4974 {
4975     myFile << value[0] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k]
4976     << value[1] << ")".<< endl;
4977 }
4978
4979 }
4980 if(evaluate(value[0],evaluate(value[2],evaluate(value[3],value[1],operation[k]),operation[j]),operation[i])-24 == 0)
4981 {
4982     count++;
4983     if(output == 1)
4984     {
4985         cout << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[3] << operation[k]
4986         << value[1] << ")".<< endl;
4987     }
4988
4989 else if(output == 2)
4990 {
4991     myFile << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[3] << operation[k]
4992         << value[1] << ")".<< endl;
4993 }
4994
4995 }
4996 //Permutasi 5
4997 if(evaluate((evaluate(evaluate(value[0],value[3],operation[i]),value[1],operation[j])),value[2],operation[k])-hasil == 0)
4998 {
4999     count++;
5000     if(output == 1)
5001     {
5002         cout << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << value[1] << ")" << operation[k]
5003         << value[2] << endl;
5004     }
5005
5006 else if(output == 2)
5007 {
5008     myFile << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << value[1] << ")" << operation[k]
5009         << value[2] << endl;
5010 }
```

IF2211 Strategi Algoritma



```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const*[])
5011 }
5012
5013 }
5014 if(evaluate(evaluate(value[0],evaluate(value[3],value[1],operation[j]),operation[i]),value[2],operation[k])-hasil==0)
5015 {
5016     count++;
5017     if(output == 1)
5018     {
5019         cout << "(" << value[0] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")" << operation[k]
5020         << value[2] << endl;
5021     }
5022
5023     else if(output == 2)
5024     {
5025         myFile << "(" << value[0] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")" << operation[k]
5026         << value[2] << endl;
5027     }
5028
5029 }
5030 if(evaluate(evaluate(value[0],value[3],operation[i]),evaluate(value[1],value[2],operation[k]),operation[j])-hasil == 0)
5031 {
5032     count++;
5033     if(output == 1)
5034     {
5035         cout << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << "(" << value[1] << operation[k] <<
5036         value[2] << ")" << endl;
5037     }
5038
5039     else if(output == 2)
5040     {
5041         myFile << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << "(" << value[1] << operation[k] <<
5042         value[2] << ")" << endl;
5043     }
5044
5045 }
5046 if(evaluate(value[0],evaluate(evaluate(value[3],value[1],operation[j]),value[2],operation[k]),operation[i])-24 == 0)
5047 {
5048     count++;
5049     if(output == 1)
5050     {
5051         cout << value[0] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")" << operation[k] <<
5052         value[2] << ")" << endl;
5053     }
5054
5055     else if(output == 2)
5056     {
5057         myFile << value[0] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")" << operation[k] <<
5058         value[2] << ")" << endl;
5059     }
5060
5061 }
5062 if(evaluate(value[0],evaluate(value[3],evaluate(value[1],value[2],operation[k]),operation[j]),operation[i])-24 == 0)
5063 {
5064     count++;
5065     if(output == 1)
5066     {
5067         cout << value[0] << operation[i] << "(" << value[3] << operation[j] << "(" << value[1] << operation[k] <<
5068         value[2] << ")" << endl;
5069     }
5070 }
```

```

File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - Tucll_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
5071     else if(output == 2)
5072     {
5073         myFile << value[0] << operation[i] << "(" << value[3] << operation[j] << "(" << value[1] << operation[k]
5074             << value[2] << ")" << endl;
5075     }
5076 }
5077 //Permutasi 6
5078 if(evaluate(evaluate(value[0],value[3],operation[i]),value[2],operation[j]),value[1],operation[k])-hasil == 0
5079 {
5080     count++;
5081     if(output == 1)
5082     {
5083         cout << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << value[2] << ")"
5084             << operation[k] << value[1] << endl;
5085     }
5086     else if(output == 2)
5087     {
5088         myFile << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << value[2] << "."
5089             << operation[k] << value[1] << endl;
5090     }
5091 }
5092 if(evaluate(evaluate(value[0],evaluate(value[3],value[2],operation[j]),operation[i]),value[1],operation[k])-hasil==0)
5093 {
5094     count++;
5095     if(output == 1)
5096     {
5097         cout << "(" << value[0] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")"
5098             << operation[k] << value[1] << endl;
5099     }
5100 }
5101
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - Tucll_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
5101 }
5102
5103 else if(output == 2)
5104 {
5105     myFile << "(" << value[0] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")" <<
5106         operation[k] << value[1] << endl;
5107 }
5108 }
5109 if(evaluate(evaluate(value[0],value[3],operation[i]),evaluate(value[2],value[1],operation[k]),operation[j])-hasil == 0)
5110 {
5111     count++;
5112     if(output == 1)
5113     {
5114         cout << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << "(" << value[2] <<
5115         operation[k] << value[1] << ")" << endl;
5116     }
5117 }
5118 else if(output == 2)
5119 {
5120     myFile << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << "(" << value[2] <<
5121         operation[k] << value[1] << ")" << endl;
5122 }
5123
5124 }
5125 if(evaluate(value[0],evaluate(evaluate(value[3],value[2],operation[j]),value[1],operation[k]),operation[i])-24 == 0)
5126 {
5127     count++;
5128     if(output == 1)
5129     {
5130

```

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```
src > 24GameSolver.cpp > main(int, char const *[])
5131     cout << value[0] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")" << operation[k] <<
5132         value[1] << ")" << endl;
5133     }
5134
5135     else if(output == 2)
5136     {
5137         myFile << value[0] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")" << operation[k] <<
5138             value[1] << ")" << endl;
5139     }
5140 }
5141 if(evaluate(value[0],evaluate(value[3],evaluate(value[2],value[1],operation[k]),operation[j]),operation[i])-24 == 0)
5142 {
5143     count++;
5144     if(output == 1)
5145     {
5146         cout << value[0] << operation[i] << "(" << value[3] << operation[j] << "(" << value[2] << operation[k]
5147             << value[1] << ")" << endl;
5148     }
5149
5150     else if(output == 2)
5151     {
5152         myFile << value[0] << operation[i] << "(" << value[3] << operation[j] << "(" << value[2] << operation[k]
5153             << value[1] << ")" << endl;
5154     }
5155
5156 }
5157 //Permutasi 7
5158 if(evaluate(evaluate(evaluate(value[1],value[0],operation[i]),value[2],operation[j]),value[3],operation[k])-hasil == 0)
5159 {
5160     count++;
5161
5162     if(output == 1)
5163     {
5164         cout << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << value[2] << ")"
5165             << operation[k] << value[3] << endl;
5166     }
5167
5168     else if(output == 2)
5169     {
5170         myFile << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << value[2] << ")"
5171             << operation[k] << value[3] << endl;
5172     }
5173 }
5174 if(evaluate(evaluate(value[1],evaluate(value[0],value[2],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
5175 {
5176     count++;
5177     if(output == 1)
5178     {
5179         cout << "(" << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")" << operation[k]
5180             << value[3] << endl;
5181     }
5182
5183     else if(output == 2)
5184     {
5185         myFile << "(" << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")" <<
5186             operation[k] << value[3] << endl;
5187     }
5188 }
5189
5190 }
```

IF2211 Strategi Algoritma

```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - Tuclit_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *)
S191 if(evaluate(evaluate(value[1],value[0],operation[i]),evaluate(value[2],value[3],operation[k]),operation[j])-hasil == 0)
S192 {
S193     count++;
S194     if(output == 1)
S195     {
S196         cout << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << "(" << value[2]
S197             << operation[k] << value[3] << ")" << endl;
S198     }
S199
S200     else if(output == 2)
S201     {
S202         myFile << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << "(" << value[2]
S203             << operation[k] << value[3] << ")" << endl;
S204     }
S205
S206 }
S207 if(evaluate(value[1],evaluate(evaluate(value[0],value[2],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
S208 {
S209     count++;
S210     if(output == 1)
S211     {
S212         cout << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")"
S213             << value[3] << ")" << endl;
S214     }
S215
S216     else if(output == 2)
S217     {
S218         myFile << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")"
S219             << operation[k]
S220             << value[3] << ")" << endl;
S221 }
S222
S223 }
S224 if(evaluate(value[1],evaluate(value[0],evaluate(value[2],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
S225 {
S226     count++;
S227     if(output == 1)
S228     {
S229         cout << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[2] << value[3]
S230             << ")" << ")" << endl;
S231     }
S232
S233     else if(output == 2)
S234     {
S235         myFile << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[2] << value[3]
S236             << ")" << ")" << endl;
S237     }
S238
S239 }
S240 //Permutasi 8
S241 if(evaluate(evaluate(value[1],value[0],operation[i]),value[3],evaluate(j),value[2],operation[k])-hasil == 0)
S242 {
S243     count++;
S244     if(output == 1)
S245     {
S246         cout << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << value[3] << ")"
S247             << value[2] << endl;
S248     }
S249
S250 }

Ln 4368, Col 30  Spaces:4  UTF-8  CRLF  C++  Win32  12.10  25/01/2023
```

```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - Tuclit_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *)
S221 }
S222
S223 }
S224 if(evaluate(value[1],evaluate(value[0],evaluate(value[2],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
S225 {
S226     count++;
S227     if(output == 1)
S228     {
S229         cout << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[2] << value[3]
S230             << ")" << ")" << endl;
S231     }
S232
S233     else if(output == 2)
S234     {
S235         myFile << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[2] << value[3]
S236             << ")" << ")" << endl;
S237     }
S238
S239 }
S240 //Permutasi 8
S241 if(evaluate(evaluate(value[1],value[0],operation[i]),value[3],evaluate(j),value[2],operation[k])-hasil == 0)
S242 {
S243     count++;
S244     if(output == 1)
S245     {
S246         cout << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << value[3] << ")"
S247             << value[2] << endl;
S248     }
S249
S250 }

Ln 4368, Col 30  Spaces:4  UTF-8  CRLF  C++  Win32  12.10  25/01/2023
```

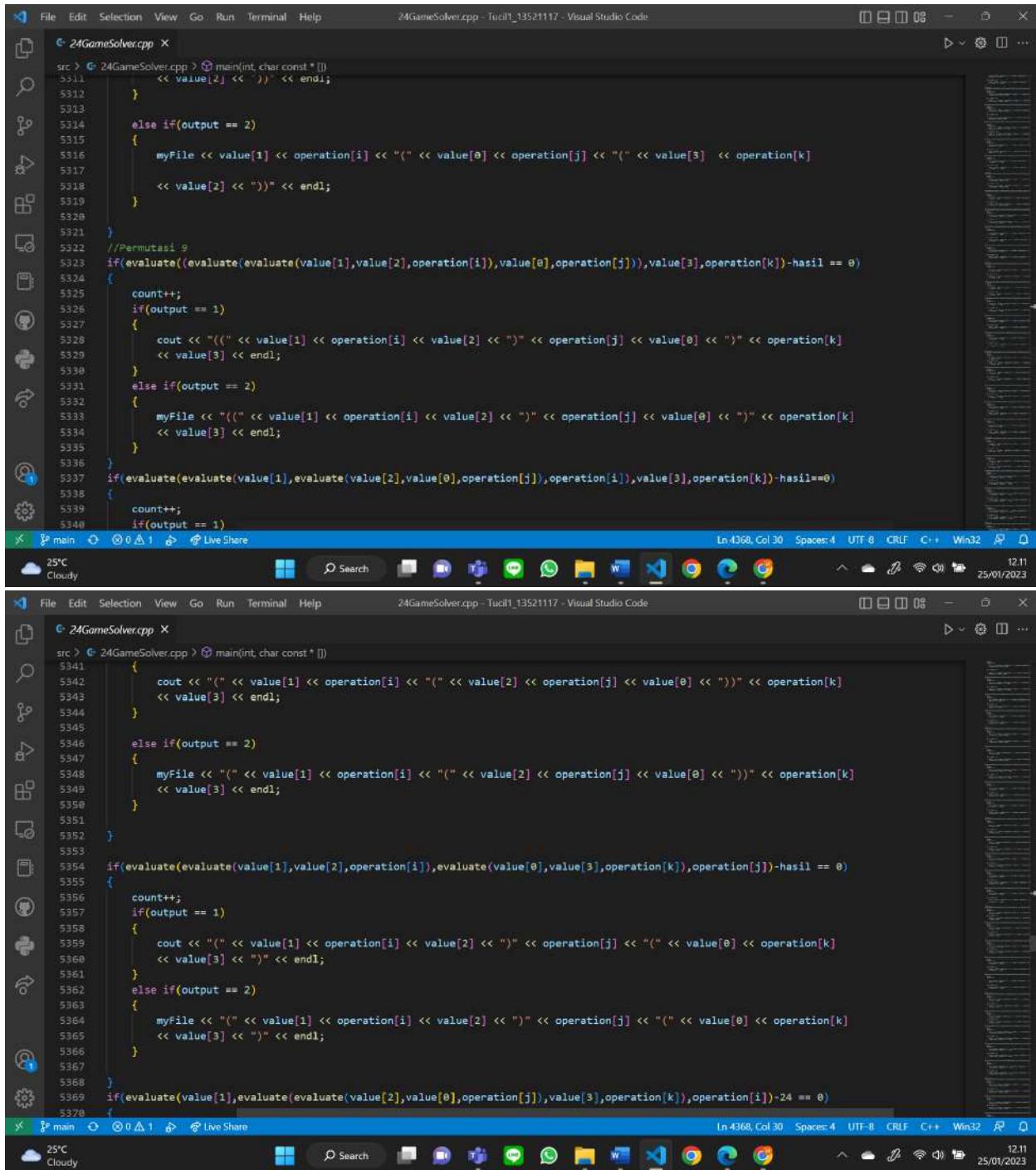
IF2211 Strategi Algoritma

```
src > 24GameSolver.cpp > main(int, char const *[])
5251     else if(output == 2)
5252     {
5253         myFile << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << value[3] << ")" << operation[k]
5254         << value[2] << endl;
5255     }
5256
5257 }
5258 if(evaluate(evaluate(value[1],evaluate(value[0],value[3],operation[j]),operation[i]),value[2],operation[k])-hasil==0)
5259 {
5260     count++;
5261     if(output == 1)
5262     {
5263         cout << "(" << value[1] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")" << operation[k]
5264         << value[2] << endl;
5265     }
5266     else if(output == 2)
5267     {
5268         myFile << "(" << value[1] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")" << operation[k]
5269         << value[2] << endl;
5270     }
5271 }
5272 if(evaluate(evaluate(value[1],value[0],operation[i]),evaluate(value[3],value[2],operation[k]),operation[j])-hasil == 0)
5273 {
5274     count++;
5275     if(output == 1)
5276     {
5277         cout << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << "(" << value[3] << operation[k]
5278         << value[2] << ")" << endl;
5279     }
5280 }
```



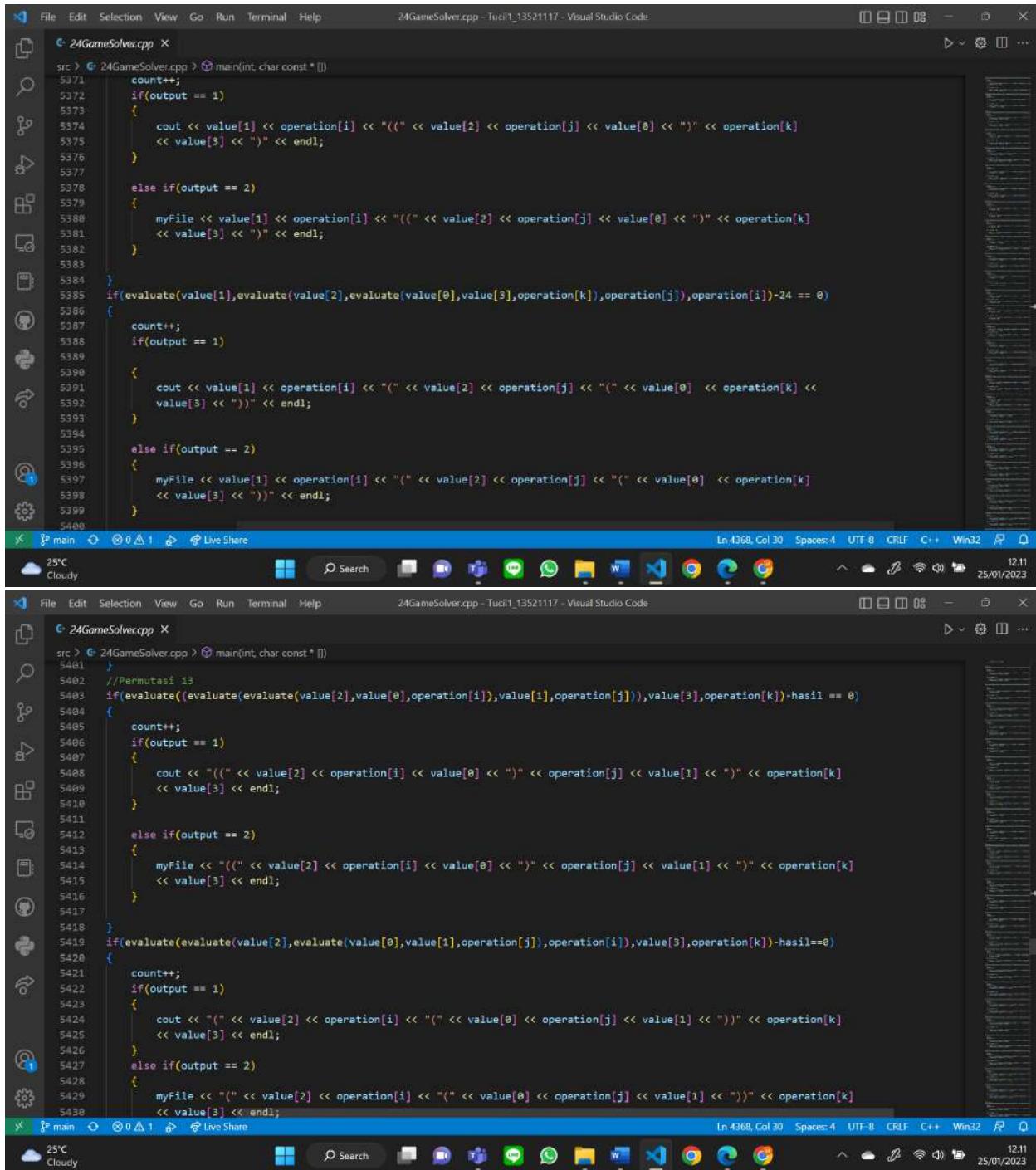
```
src > 24GameSolver.cpp > main(int, char const *[])
5281     else if(output == 2)
5282     {
5283         myFile << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << "(" << value[3] << operation[k]
5284         << value[2] << ")" << endl;
5285     }
5286
5287 }
5288 if(evaluate(value[1],evaluate(evaluate(value[0],value[3],operation[j]),value[2],operation[k]),operation[i])-24 == 0)
5289 {
5290     count++;
5291     if(output == 1)
5292     {
5293         cout << value[1] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")" << operation[k]
5294         << value[2] << ")" << endl;
5295     }
5296
5297     else if(output == 2)
5298     {
5299         myFile << value[1] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")" << operation[k]
5300         << value[2] << ")" << endl;
5301     }
5302 }
5303
5304 if(evaluate(value[1],evaluate(value[0],evaluate(value[3],value[2],operation[k]),operation[j]),operation[i])-24 == 0)
5305 {
5306     count++;
5307     if(output == 1)
5308     {
5309         cout << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[3] << operation[k]
```

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```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const[])
5311     << value[2] << endl;
5312 }
5313
5314 else if(output == 2)
{
    myFile << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[3] << operation[k]
    << value[2] << ")" << endl;
}
5315
5316
5317 //Permutasi 9
5318 if(evaluate(evaluate(value[1],value[2],operation[i]),value[0],operation[j]),value[3],operation[k])-hasil == 0)
5319 {
    count++;
5320     if(output == 1)
    {
        cout << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << value[0] << ")" << operation[k]
        << value[3] << endl;
    }
5321 else if(output == 2)
    {
        myFile << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << value[0] << ")" << operation[k]
        << value[3] << endl;
    }
5322
5323 if(evaluate(evaluate(value[1],evaluate(value[2],value[0],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
5324 {
    count++;
5325     if(output == 1)
5326     {
5327         cout << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << value[0] << ")" << operation[k]
5328         << value[3] << endl;
5329     }
5330 else if(output == 2)
5331     {
5332         myFile << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << value[0] << ")" << operation[k]
5333         << value[3] << endl;
5334     }
5335
5336 }
5337 if(evaluate(evaluate(value[1],evaluate(value[2],value[0],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
5338 {
    count++;
5339     if(output == 1)
5340     {
5341         cout << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << value[0] << ")" << operation[k]
5342         << value[3] << endl;
5343     }
5344
5345 else if(output == 2)
5346     {
5347         myFile << "(" << value[1] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")" << ")" << operation[k]
5348         << value[3] << endl;
5349     }
5350
5351 }
5352
5353 if(evaluate(evaluate(value[1],value[2],operation[i]),evaluate(value[0],value[3],operation[k]),operation[j])-hasil == 0)
5354 {
    count++;
5355     if(output == 1)
5356     {
5357         cout << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << "(" << value[0] << operation[k]
5358         << value[3] << ")" << endl;
5359     }
5360 else if(output == 2)
5361     {
5362         myFile << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << "(" << value[0] << operation[k]
5363         << value[3] << ")" << endl;
5364     }
5365
5366 }
5367
5368 if(evaluate(value[1],evaluate(evaluate(value[2],value[0],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
5369 {
    count++;
5370     if(output == 1)
5371     {
5372         cout << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << "(" << value[0] << operation[k]
5373         << value[3] << ")" << endl;
5374     }
5375
5376 else if(output == 2)
5377     {
5378         myFile << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << "(" << value[0] << operation[k]
5379         << value[3] << ")" << endl;
5380     }
5381
5382 }
```

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```
src > 24GameSolver.cpp > main(int, char const *[])
5371     count++;
5372     if(output == 1)
5373     {
5374         cout << value[1] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")" << operation[k]
5375         << value[3] << endl;
5376     }
5377
5378     else if(output == 2)
5379     {
5380         myFile << value[1] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")" << operation[k]
5381         << value[3] << endl;
5382     }
5383
5384 }
5385 if(evaluate(value[1],evaluate(value[2],evaluate(value[0],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
5386 {
5387     count++;
5388     if(output == 1)
5389     {
5390         cout << value[1] << operation[i] << "(" << value[2] << operation[j] << "(" << value[0] << operation[k] <<
5391         value[3] << ")" << endl;
5392     }
5393
5394     else if(output == 2)
5395     {
5396         myFile << value[1] << operation[i] << "(" << value[2] << operation[j] << "(" << value[0] << operation[k]
5397         << value[3] << ")" << endl;
5398     }
5399 }
5400
5401
5402 //Permutasi 13
5403 if(evaluate(evaluate(evaluate(value[2],value[0],operation[i]),value[1],operation[j]),value[3],operation[k])-hasil == 0)
5404 {
5405     count++;
5406     if(output == 1)
5407     {
5408         cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << value[1] << ")" << operation[k]
5409         << value[3] << endl;
5410     }
5411
5412     else if(output == 2)
5413     {
5414         myFile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << value[1] << ")" << operation[k]
5415         << value[3] << endl;
5416     }
5417 }
5418
5419 if(evaluate(evaluate(value[2],evaluate(value[0],value[1],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
5420 {
5421     count++;
5422     if(output == 1)
5423     {
5424         cout << "(" << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")" << operation[k]
5425         << value[3] << endl;
5426     }
5427     else if(output == 2)
5428     {
5429         myFile << "(" << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")" << operation[k]
5430         << value[3] << endl;
5431 }
```

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```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const *[])
5431 }
5432 }
5433 if(evaluate(evaluate(value[2],value[0],operation[i]),evaluate(value[1],value[3],operation[k]),operation[j])-hasil == 0)
5434 {
5435     count++;
5436     if(output == 1)
5437     {
5438         cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[1]
5439         << operation[k] << value[3] << ")" << endl;
5440     }
5441     else if(output == 2)
5442     {
5443         myFile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[1]
5444         << operation[k] << value[3] << ")" << endl;
5445     }
5446 }
5447 }
5448 if(evaluate(value[2],evaluate(evaluate(value[0],value[1],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
5449 {
5450     count++;
5451     if(output == 1)
5452     {
5453         cout << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
5454         << operation[k] << value[3] << ")" << endl;
5455     }
5456 }
5457 else if(output == 2)
5458 {
5459     myFile << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
5460 }
5461 << operation[k] << value[3] << ")" << endl;
5462 }
5463 }
5464 if(evaluate(value[2],evaluate(value[0],evaluate(value[1],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
5465 {
5466     count++;
5467     if(output == 1)
5468     {
5469         cout << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[1]
5470         << operation[k] << value[3] << ")" << endl;
5471     }
5472 }
5473 }
5474 else if(output == 2)
5475 {
5476     myFile << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[1]
5477         << operation[k] << value[3] << ")" << endl;
5478 }
5479 }
5480 //Permutasi 14
5481 if(evaluate(evaluate(value[2],value[0],operation[i]),value[3],operation[j]),evaluate(value[1],operation[k])-hasil == 0)
5482 {
5483     count++;
5484     if(output == 1)
5485     {
5486         cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << value[3] << ")"
5487         << operation[k] << value[1] << endl;
5488     }
5489 }
```

IF2211 Strategi Algoritma

```
src > 24GameSolver.cpp > main(int, char const *[])
5491     else if(output == 2)
5492     {
5493         myFile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << value[3] << ")"
5494             << operation[k] << value[1] << endl;
5495     }
5496
5497 }
5498 if(evaluate(evaluate(value[2],evaluate(value[0],value[3],operation[j]),operation[i]),value[1],operation[k])-hasil==0)
5499 {
5500     count++;
5501     if(output == 1)
5502     {
5503         cout << "(" << value[2] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")"
5504             << operation[k] << value[1] << endl;
5505     }
5506     else if(output == 2)
5507     {
5508         myFile << "(" << value[2] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")"
5509             << operation[k] << value[1] << endl;
5510     }
5511
5512 }
5513 if(evaluate(evaluate(value[2],value[0],operation[i]),evaluate(value[3],value[1],operation[k]),operation[j])-hasil == 0)
5514 {
5515     count++;
5516     if(output == 1)
5517     {
5518         cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[3]
5519             << operation[k] << value[1] << ")" << endl;
5520     }
5521
5522     else if(output == 2)
5523     {
5524         myFile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[3]
5525             << operation[k] << value[1] << ")" << endl;
5526     }
5527
5528 }
5529 if(evaluate(value[2],evaluate(evaluate(value[0],value[3],operation[j]),value[1],operation[k]),operation[i])-24 == 0)
5530 {
5531     count++;
5532     if(output == 1)
5533     {
5534         cout << value[2] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")"
5535             << operation[k] << value[1] << ")" << endl;
5536     }
5537     else if(output == 2)
5538     {
5539         myFile << value[2] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")"
5540             << operation[k] << value[1] << ")" << endl;
5541     }
5542
5543 }
5544 if(evaluate(value[2],evaluate(value[0],evaluate(value[3],value[1],operation[k]),operation[j]),operation[i])-24 == 0)
5545 {
5546     count++;
5547     if(output == 1)
5548     {
5549         cout << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[3]
5550             << operation[k] << value[1] << ")" << endl;
5551
5552     }
5553
5554     else if(output == 2)
5555     {
5556         myFile << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[3]
5557             << operation[k] << value[1] << ")" << ")" << endl;
5558     }
5559
5560 }
```

IF2211 Strategi Algoritma

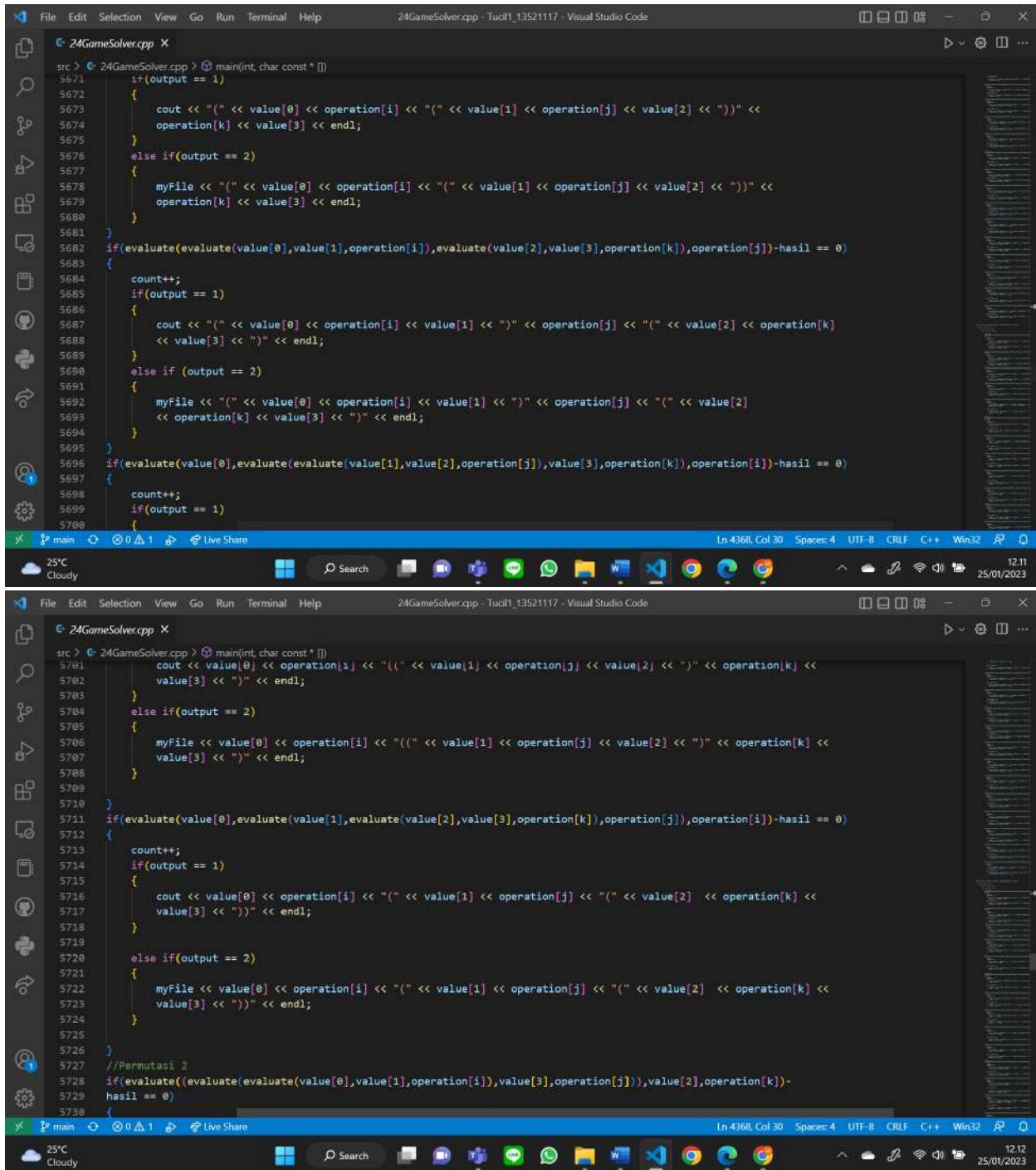
```
24GameSolver.cpp
```

```
src > 24GameSolver.cpp > main(int, char const *[])
552     }
553     else if(output == 2)
554     {
555         myfile << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[3]
556         << operation[k] << value[1] << ")" ) << endl;
557     }
558 }
559 //Permutasi 15
560 if(evaluate(evaluate(value[2],value[1],operation[i]),value[0],operation[j]),value[3],operation[k])-hasil == 0)
561 {
562     count++;
563     if(output == 1)
564     {
565         cout << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << value[0] << ")"
566         << operation[k] << value[3] << endl;
567     }
568     else if(output == 2)
569     {
570         myfile << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << value[0] << ""
571         << operation[k] << value[3] << endl;
572     }
573 }
574 if(evaluate(evaluate(value[2],evaluate(value[1],value[0],operation[j]),value[3],operation[k])-hasil==0)
575 {
576     count++;
577     if(output == 1)
578     {
579         cout << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << value[0] << ""
580         << operation[k] << value[3] << endl;
581     }
582     else if(output == 2)
583     {
584         cout << "(" << value[2] << operation[i] << "(" << value[1] << operation[j] << value[0] << ")"
585         << operation[k] << value[3] << endl;
586     }
587 }
588 if(evaluate(evaluate(value[2],value[1],operation[i]),evaluate(value[0],value[3],operation[k]),operation[j])-hasil == 0)
589 {
590     count++;
591     if(output == 1)
592     {
593         cout << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << "(" << value[0]
594         << operation[k] << value[3] << ")" << endl;
595     }
596     else if(output == 2)
597     {
598         myfile << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << "(" << value[0]
599         << operation[k] << value[3] << ")" << endl;
600     }
601 }
602 if(evaluate(evaluate(value[2],evaluate(value[1],value[0],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
603 {
604     count++;
605     if(output == 1)
606     {
607         cout << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << "(" << value[0]
608         << operation[k] << value[3] << ")" << endl;
609     }
610 }
```

IF2211 Strategi Algoritma

```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
5611     if(output == 1)
5612     {
5613         cout << value[2] << operation[i] << "(" << value[1] << operation[j] << value[0] << ")"
5614             << operation[k] << value[3] << ")" << endl;
5615     }
5616
5617     else if(output == 2)
5618     {
5619         myFile << value[2] << operation[i] << "(" << value[1] << operation[j] << value[0] << ")"
5620             << operation[k] << value[3] << ")" << endl;
5621     }
5622
5623 }
5624 if(evaluate(value[2],evaluate(value[1],evaluate(value[0],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
5625 {
5626     count++;
5627     if(output == 1)
5628     {
5629         cout << value[2] << operation[i] << "(" << value[1] << operation[j] << "(" << value[0]
5630             << operation[k] << value[3] << ")" << endl;
5631     }
5632     else if(output == 2)
5633     {
5634         myFile << value[2] << operation[i] << "(" << value[1] << operation[j] << "(" << value[0]
5635             << operation[k] << value[3] << ")" << endl;
5636     }
5637 }
5638
5639
5640
5641
5642     == value[2] && value[0] != value[1] && value[3] != value[1])
5643
5644     0; i < 4; i++)
5645
5646     j = 0; j < 4; j++)
5647
5648     int k = 0; k < 4; k++)
5649
5650 //Permutasi 1
5651 if(evaluate((evaluate(evaluate(value[0],value[1],operation[i]),value[2],operation[j]),value[3],operation[k])-
5652 hasil == 0)
5653 {
5654     count++;
5655     if(output == 1)
5656     {
5657         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")"
5658             << operation[k] << value[3] << endl;
5659     }
5660     else if(output == 2)
5661     {
5662         myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")"
5663             << operation[k] << value[3] << endl;
5664     }
5665
5666 }
5667 if(evaluate(evaluate(value[0],evaluate(value[1],value[2],operation[j]),operation[i]),value[3],operation[k])-
5668 hasil==0)
5669 {
5670     count++;
5671 }
```

IF2211 Strategi Algoritma



```
src > 24GameSolver.cpp > main(int, char const[])
5671     if(output == 1)
5672     {
5673         cout << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" )" <<
5674             operation[k] << value[3] << endl;
5675     }
5676     else if(output == 2)
5677     {
5678         myFile << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" )" <<
5679             operation[k] << value[3] << endl;
5680     }
5681 }
5682 if(evaluate(evaluate(value[0],value[1],operation[i]),evaluate(value[2],value[3],operation[k]),operation[j])-hasil == 0)
5683 {
5684     count++;
5685     if(output == 1)
5686     {
5687         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2] << operation[k]
5688             << value[3] << ")" << endl;
5689     }
5690     else if (output == 2)
5691     {
5692         myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2]
5693             << operation[k] << value[3] << ")" << endl;
5694     }
5695 }
5696 if(evaluate(value[0],evaluate(evaluate(value[1],value[2],operation[j]),value[3],operation[k]),operation[i])-hasil == 0)
5697 {
5698     count++;
5699     if(output == 1)
5700     {
5701         cout << value[0] << operation[i] << value[1] << operation[j] << "(" << value[2] << operation[k] <<
5702             value[3] << ")" << endl;
5703     }
5704     else if(output == 2)
5705     {
5706         myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" << operation[k] <<
5707             value[3] << endl;
5708     }
5709 }
5710 if(evaluate(value[0],evaluate(value[1],evaluate(value[2],value[3],operation[k]),operation[j]),operation[i])-hasil == 0)
5711 {
5712     count++;
5713     if(output == 1)
5714     {
5715         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2] << operation[k] <<
5716             value[3] << ")" << endl;
5717     }
5718     else if(output == 2)
5719     {
5720         myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2] << operation[k] <<
5721             value[3] << ")" << endl;
5722     }
5723 }
5724 }
5725 //Permutasi 2
5726 if(evaluate(evaluate(value[0],value[1],operation[i]),value[3],operation[j]),value[2],operation[k])-hasil == 0)
5727 {
5728 }
5729 }
```

IF2211 Strategi Algoritma

```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TucilI_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const[])
5731     count++;
5732     if(output == 1)
5733     {
5734         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[3] << ")" << operation[k] <<
5735         value[2] << endl;
5736     }
5737
5738     else if(output == 2)
5739     {
5740         myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[3] << ")" << operation[k] <<
5741         value[2] << endl;
5742     }
5743
5744 }
5745 if(evaluate(evaluate(value[0],evaluate(value[1],value[3],operation[j]),operation[i]),value[2],operation[k])-hasil==0)
5746 {
5747     count++;
5748     if(output == 1)
5749     {
5750         cout << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" ) << operation[k] <<
5751         value[2] << endl;
5752     }
5753
5754     else if(output == 2)
5755     {
5756         myFile << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" ) << operation[k] <<
5757         value[2] << endl;
5758     }
5759 }
5760 }
```

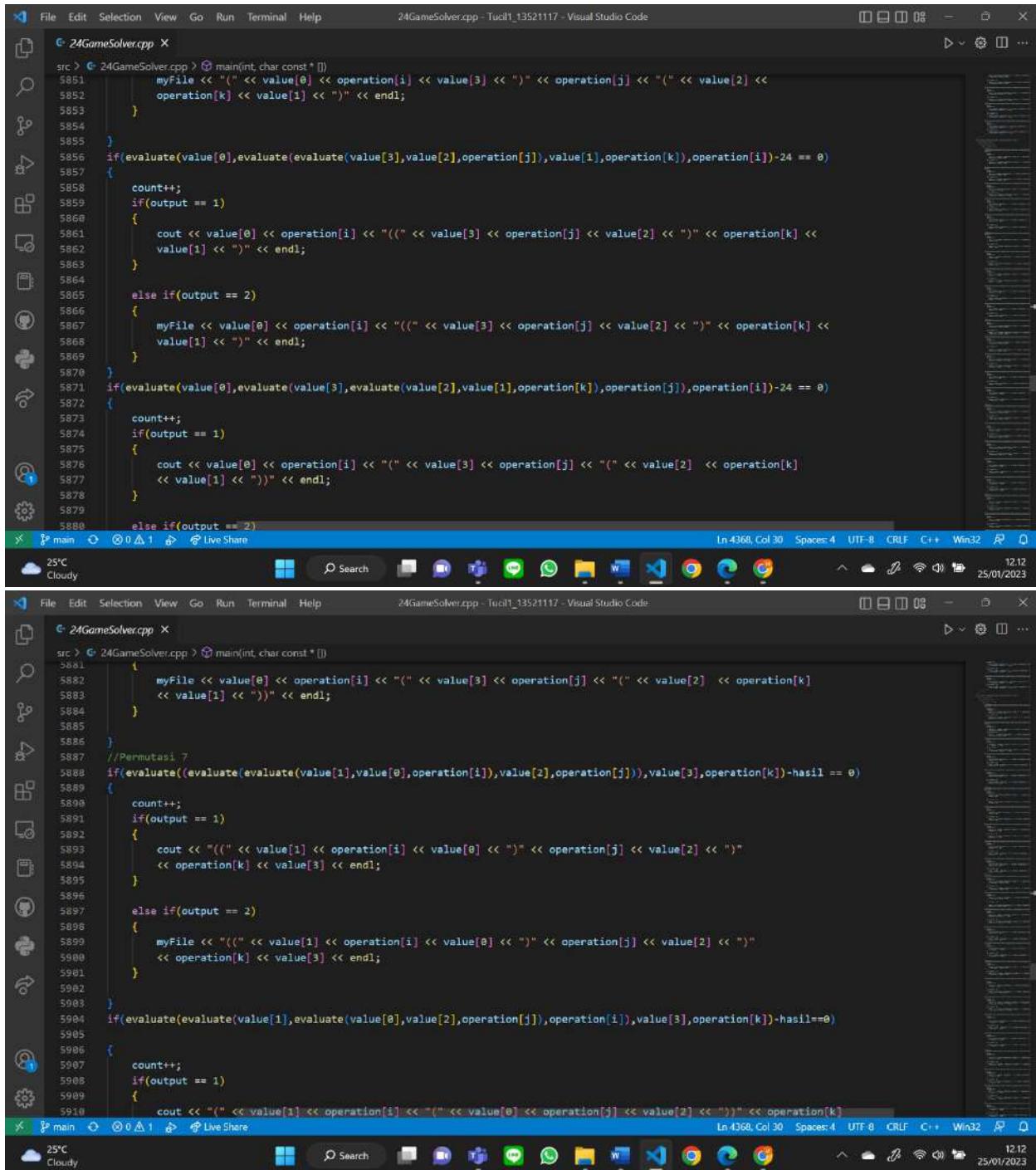


```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TucilI_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const[])
5761 if(evaluate(evaluate(value[0],value[1],operation[i]),evaluate(value[3],value[2],operation[k]),operation[j])-hasil == 0)
5762 {
5763     count++;
5764     if(output == 1)
5765     {
5766         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[3] << operation[k] <<
5767         value[2] << ")" << endl;
5768     }
5769
5770     else if(output == 2)
5771     {
5772         myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[3] << operation[k] <<
5773         value[2] << ")" << endl;
5774     }
5775
5776 }
5777 if(evaluate(value[0],evaluate(evaluate(value[1],value[3],operation[j]),value[2],operation[k]),operation[i])-24 == 0)
5778 {
5779     count++;
5780     if(output == 1)
5781     {
5782         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] <<
5783         value[2] << ")" << endl;
5784     }
5785
5786     else if(output == 2)
5787     {
5788         myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] <<
5789         value[2] << ")" << endl;
5790     }
5791 }
```

IF2211 Strategi Algoritma

```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - Tucll_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const*[])
5792 }
5793 if(evaluate(value[0],evaluate(value[1],evaluate(value[3],value[2],operation[k]),operation[j]),operation[i])-24 == 0)
5794 {
5795     count++;
5796     if(output == 1)
5797     {
5798         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[3] << operation[k] <<
5799         value[2] << ")" << endl;
5800     }
5801     else if(output == 2)
5802     {
5803         myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[3] << operation[k] <<
5804         value[2] << ")" << endl;
5805     }
5806 }
5807 //Permutasi 6
5808 if(evaluate(evaluate(evaluate(value[0],value[3],operation[i]),value[2],operation[j]),value[1],operation[k])-hasil == 0)
5809 {
5810     count++;
5811     if(output == 1)
5812     {
5813         cout << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << value[2] << "
5814         << operation[k] << value[1] << endl;
5815     }
5816     else if(output == 2)
5817     {
5818         myFile << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << value[2] << ")"
5819     }
5820 }
5821 << operation[k] << value[1] << endl;
5822 }
5823 if(evaluate(evaluate(value[0],evaluate(value[3],value[2],operation[j]),operation[i]),value[1],operation[k])-hasil==0)
5824 {
5825     count++;
5826     if(output == 1)
5827     {
5828         cout << "(" << value[0] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")"
5829         << operation[k] << value[1] << endl;
5830     }
5831     else if(output == 2)
5832     {
5833         myFile << "(" << value[0] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")" <<
5834         operation[k] << value[1] << endl;
5835     }
5836 }
5837 if(evaluate(evaluate(value[0],value[3],operation[i]),evaluate(value[2],value[1],operation[k]),operation[j])-hasil == 0)
5838 {
5839     count++;
5840     if(output == 1)
5841     {
5842         cout << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << "(" << value[2] <<
5843         operation[k] << value[1] << ")" << endl;
5844     }
5845     else if(output == 2)
5846     {
5847         myFile << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << "(" << value[2] <<
5848         operation[k] << value[1] << ")" << endl;
5849     }
5850 }
5851 if(evaluate(evaluate(value[0],value[3],operation[i]),evaluate(value[2],value[1],operation[k]),operation[j])-hasil == 0)
5852 {
5853     count++;
5854     if(output == 1)
5855     {
5856         cout << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << "(" << value[2] <<
5857         operation[k] << value[1] << ")" << endl;
5858 }
```

IF2211 Strategi Algoritma



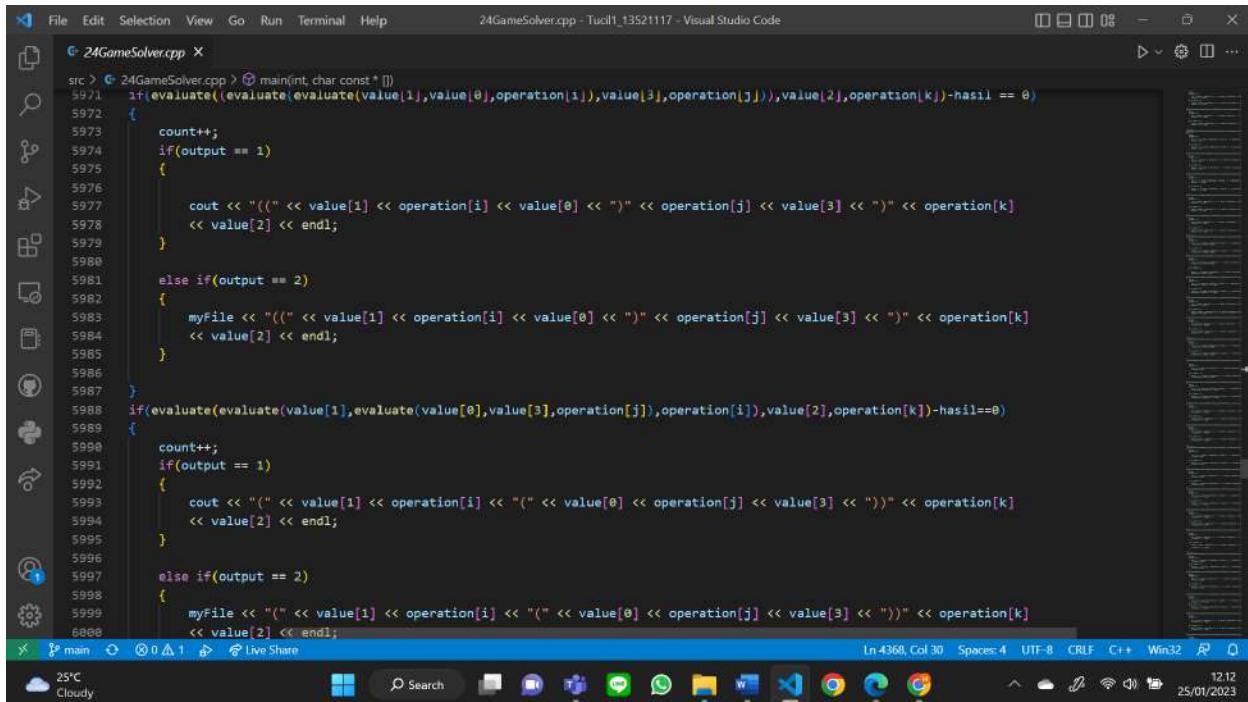
```
src > 24GameSolver.cpp > main(int, char const*[])
5851     myFile << "(" << value[0] << operation[i] << value[3] << ")" << operation[j] << "(" << value[2] <<
5852         operation[k] << value[1] << ")" << endl;
5853     }
5854 }
5855 if(evaluate(value[0],evaluate(evaluate(value[3],value[2],operation[j]),value[1],operation[k]),operation[i])-24 == 0)
5856 {
5857     count++;
5858     if(output == 1)
5859     {
5860         cout << value[0] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")" << operation[k] <<
5861         value[1] << ")" << endl;
5862     }
5863 else if(output == 2)
5864 {
5865     cout << value[0] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")" << operation[k] <<
5866         value[1] << ")" << endl;
5867 }
5868 }
5869 if(evaluate(value[0],evaluate(value[3],evaluate(value[2],value[1],operation[k]),operation[j]),operation[i])-24 == 0)
5870 {
5871     count++;
5872     if(output == 1)
5873     {
5874         cout << value[0] << operation[i] << "(" << value[3] << operation[j] << "(" << value[2] << operation[k]
5875             << value[1] << ")" << endl;
5876     }
5877 }
5878 else if(output == 2)
5879 {
5880     cout << value[0] << operation[i] << "(" << value[3] << operation[j] << "(" << value[2] << operation[k]
5881             << value[1] << ")" << endl;
5882 }
5883 }
5884 }
5885 }
5886 }
5887 //Permutasi ?
5888 if(evaluate(evaluate(value[1],value[0],operation[i]),value[2],operation[j]),value[3],operation[k]-hasil == 0)
5889 {
5890     count++;
5891     if(output == 1)
5892     {
5893         cout << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << value[2] << ")"
5894             << operation[k] << value[3] << endl;
5895     }
5896 else if(output == 2)
5897 {
5898     cout << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << value[2] << ")"
5899             << operation[k] << value[3] << endl;
5900 }
5901 }
5902 if(evaluate(evaluate(value[1],evaluate(value[0],value[2],operation[j]),operation[i]),value[3],operation[k]-hasil==0)
5903 {
5904     count++;
5905     if(output == 1)
5906     {
5907         cout << "(" << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")" << operation[k]
5908             << value[3] << endl;
5909     }
5910 }
```

```

File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - Tuclil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
5911     << value[3] << endl;
5912 }
5913
5914 else if(output == 2)
5915 {
5916     myFile << "(" << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")" )
5917     << operation[k] << value[3] << endl;
5918 }
5919
5920 }
5921 if(evaluate(evaluate(value[1],value[0],operation[i]),evaluate(value[2],value[3],operation[k]),operation[j])-hasil == 0)
5922 {
5923     count++;
5924     if(output == 1)
5925     {
5926         cout << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << "(" << value[2]
5927         << operation[k] << value[3] << ")" << endl;
5928     }
5929
5930 else if(output == 2)
5931 {
5932     myFile << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << "(" << value[2]
5933         << operation[k] << value[3] << ")" << endl;
5934 }
5935
5936 }
5937 if(evaluate(value[1],evaluate(evaluate(value[0],value[2],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
5938 {
5939     count++;
5940     if(output == 1)
5941     {
5942         cout << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")" << operation[k]
5943         << value[3] << ")" << endl;
5944     }
5945
5946 else if(output == 2)
5947 {
5948     myFile << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")" << operation[k]
5949         << value[3] << ")" << endl;
5950 }
5951
5952
5953 }
5954 if(evaluate(value[1],evaluate(value[0],evaluate(value[2],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
5955 {
5956     count++;
5957     if(output == 1)
5958     {
5959         cout << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[2] << operation[k]
5960         << value[3] << ")" << endl;
5961     }
5962
5963 else if(output == 2)
5964 {
5965     myFile << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[2] << operation[k]
5966         << value[3] << ")" << endl;
5967 }
5968
5969 }
5970 //Permutasi 8
5971
5972
5973
5974
5975
5976
5977
5978 //Permutasi 8

```

IF2211 Strategi Algoritma



The screenshot shows the Visual Studio Code interface with the following details:

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Title Bar:** 24GameSolver.cpp - TUDIT_13521117 - Visual Studio Code
- Code Editor:** The main area displays C++ code for a 24 Game solver. The code uses nested loops and if statements to evaluate different permutations of four numbers (value[0], value[1], value[2], value[3]) using three operations (operation[i], operation[j], operation[k]). It prints the results to a file named myFile. The code spans from line 5971 to 6800.
- Right Panel:** Shows a tree view of the project structure and a list of files.
- Bottom Bar:** Includes icons for main, search, file operations, and live share, along with status information: Line 4368, Column 30, Spaces: 4, UTF-8, CRLF, C++, Win32, and a date/time stamp: 25/01/2023, 12:12.
- System Icons:** Weather (25°C, Cloudy), taskbar icons for various applications like File Explorer, Task View, and Start, and system status icons.

IF2211 Strategi Algoritma

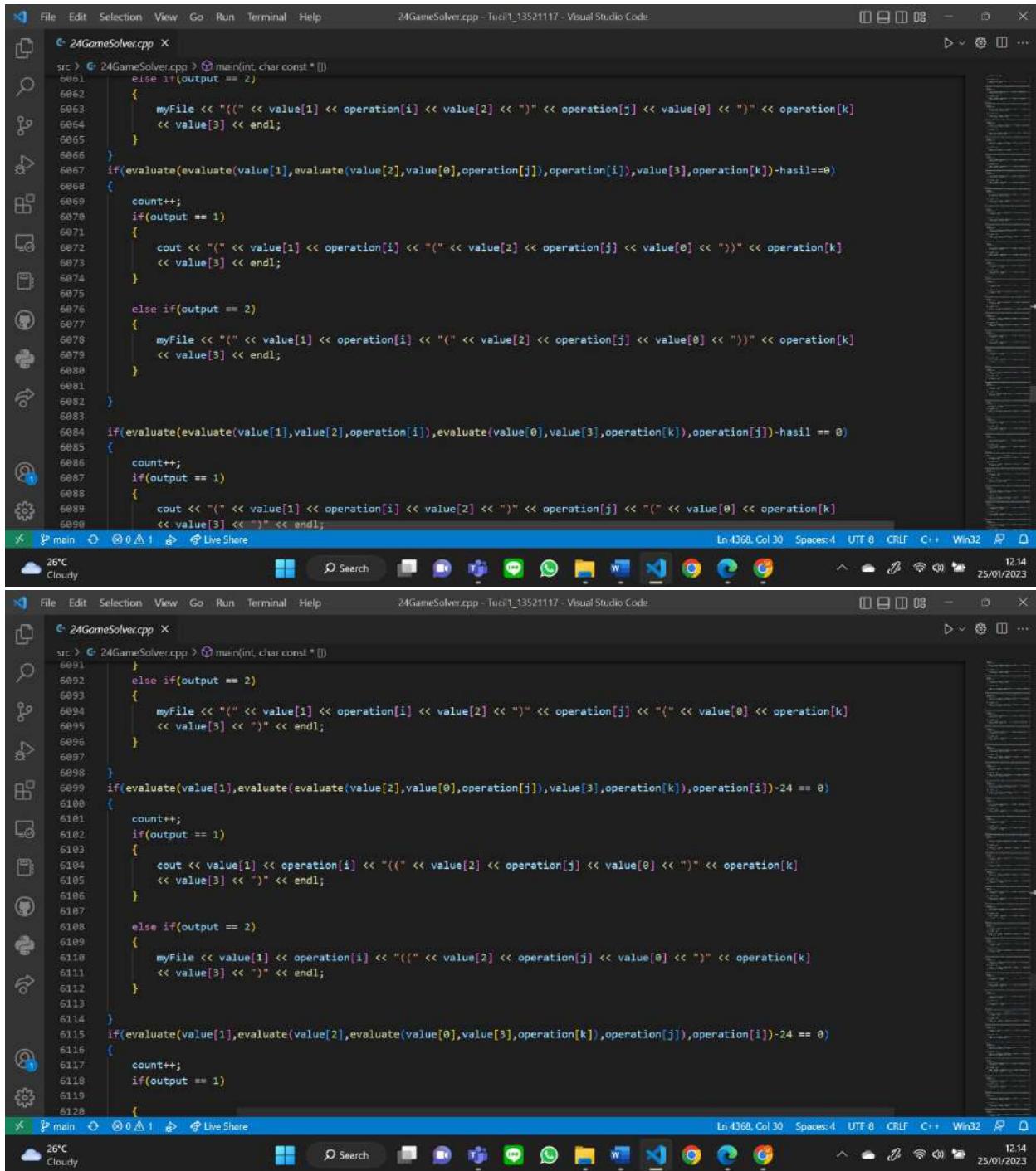
```
24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
File Edit Selection View Go Run Terminal Help
src > 24GameSolver.cpp > main(int, char const *[])
6881     }
6882 }
6883 if(evaluate(evaluate(value[1],value[0],operation[i]),evaluate(value[3],value[2],operation[k]),operation[j])-hasil == 0)
6884 {
6885     count++;
6886     if(output == 1)
6887     {
6888         cout << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << "(" << value[3] << operation[k]
6889         << value[2] << ")" << endl;
6890     }
6891 else if(output == 2)
6892 {
6893     myFile << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << "(" << value[3] << operation[k]
6894         << value[2] << ")" << endl;
6895 }
6896 }
6897 if(evaluate(value[1],evaluate(evaluate(value[0],value[3],operation[j]),value[2],operation[k]),operation[i])-24 == 0)
6898 {
6899     count++;
6900     if(output == 1)
6901     {
6902         cout << value[1] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")" << operation[k]
6903         << value[2] << ")" << endl;
6904     }
6905 else if(output == 2)
6906 {
6907     myFile << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[3] << operation[k]
6908         << value[2] << ")" << endl;
6909 }
6910 }
6911
6912 //Permutasi 9
6913 if(evaluate((evaluate(evaluate(value[1],value[2],operation[i]),value[0],operation[j]),value[3],operation[k])-hasil == 0)
6914 {
6915     count++;
6916     if(output == 1)
6917     {
6918         cout << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << value[0] << ")" << operation[k]
6919         << value[3] << endl;
6920     }
6921 }
```

26°C Cloudy 12.14 25/01/2023

```
24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
File Edit Selection View Go Run Terminal Help
src > 24GameSolver.cpp > main(int, char const *[])
6831     << value[2] << ")" << endl;
6832 }
6833 }
6834 if(evaluate(value[1],evaluate(value[0],evaluate(value[3],value[2],operation[k]),operation[j]),operation[i])-24 == 0)
6835 {
6836     count++;
6837     if(output == 1)
6838     {
6839         cout << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[3] << operation[k]
6840         << value[2] << ")" << endl;
6841     }
6842 }
6843 else if(output == 2)
6844 {
6845     myFile << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[3] << operation[k]
6846         << value[2] << ")" << endl;
6847 }
6848 }
6849 }
6850 }
6851 //Permutasi 9
6852 if(evaluate((evaluate(evaluate(value[1],value[2],operation[i]),value[0],operation[j]),value[3],operation[k])-hasil == 0)
6853 {
6854     count++;
6855     if(output == 1)
6856     {
6857         cout << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << value[0] << ")" << operation[k]
6858         << value[3] << endl;
6859     }
6860 }
```

26°C Cloudy 12.14 25/01/2023

IF2211 Strategi Algoritma



```
src > 24GameSolver.cpp > main(int, char const *[])
6661     else if(output == 2)
6662     {
6663         myFile << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << value[0] << ")" << operation[k]
6664         << value[3] << endl;
6665     }
6666 }
6667 if(evaluate(evaluate(value[1],evaluate(value[2],value[0],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
6668 {
6669     count++;
6670     if(output == 1)
6671     {
6672         cout << "(" << value[1] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")" << operation[k]
6673         << value[3] << endl;
6674     }
6675
6676     else if(output == 2)
6677     {
6678         myFile << "(" << value[1] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")" << operation[k]
6679         << value[3] << endl;
6680     }
6681
6682 }
6683
6684 if(evaluate(evaluate(value[1],value[2],operation[i]),evaluate(value[0],value[3],operation[k]),operation[j])-hasil == 0)
6685 {
6686     count++;
6687     if(output == 1)
6688     {
6689         cout << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << "(" << value[0] << operation[k]
6690         << value[3] << ")" << endl;
6691
6692     }
6693
6694     else if(output == 2)
6695     {
6696         myFile << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << "(" << value[0] << operation[k]
6697         << value[3] << ")" << endl;
6698     }
6699
6700     if(evaluate(value[1],evaluate(evaluate(value[2],value[0],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
6701     {
6702         count++;
6703         if(output == 1)
6704         {
6705             cout << value[1] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")" << operation[k]
6706             << value[3] << ")" << endl;
6707         }
6708
6709         else if(output == 2)
6710         {
6711             myFile << value[1] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")" << operation[k]
6712             << value[3] << ")" << endl;
6713         }
6714     }
6715
6716     if(evaluate(value[1],evaluate(value[2],evaluate(value[0],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
6717     {
6718         count++;
6719         if(output == 1)
6720         {
```

IF2211 Strategi Algoritma

```
src > 24GameSolver.cpp > main(int, char const[])
6121     cout << value[1] << operation[i] << "(" << value[2] << operation[j] << "(" << value[0] << operation[k] <<
6122         value[3] << ")");
6123     }
6124
6125     else if(output == 2)
6126     {
6127         myFile << value[1] << operation[i] << "(" << value[2] << operation[j] << "(" << value[0] << operation[k]
6128             << value[3] << ")");
6129     }
6130
6131 }
6132 //Permutasi 10
6133 if(evaluate((evaluate(value[1],value[2],operation[i]),value[3],operation[j])),value[0],operation[k])-hasil == 0)
6134 {
6135     count++;
6136     if(output == 1)
6137     {
6138         cout << "(" << value[1] << operation[i] << value[2] << ")"
6139             << operation[j] << value[3] << ")"
6140                 << operation[k];
6141     }
6142     else if(output == 2)
6143     {
6144         myFile << "(" << value[1] << operation[i] << value[2] << ")"
6145             << operation[j] << value[3] << ")"
6146                 << operation[k];
6147     }
6148     if(evaluate(value[1],evaluate(value[2],value[3],operation[j]),operation[i]),value[0],operation[k])-hasil==0)
6149     {
6150         count++;
6151         if(output == 1)
6152         {
6153             cout << "(" << value[1] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")"
6154                 << value[0] << endl;
6155         }
6156         else if(output == 2)
6157         {
6158             myFile << "(" << value[1] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")"
6159                 << operation[k] << value[0] << endl;
6160         }
6161     }
6162     if(evaluate(evaluate(value[1],value[2],operation[i]),evaluate(value[3],value[0],operation[k]),operation[j])-hasil == 0)
6163     {
6164         count++;
6165         if(output == 1)
6166         {
6167             cout << "(" << value[1] << operation[i] << value[2] << ")"
6168                 << operation[j] << "(" << value[3] <<
6169                     operation[k] << value[0] << ")";
6170         }
6171         else if(output == 2)
6172         {
6173             myFile << "(" << value[1] << operation[i] << value[2] << ")"
6174                 << operation[j] << "(" << value[3] <<
6175                     operation[k] << value[0] << ")";
6176         }
6177     }
6178     if(evaluate(value[1],evaluate(evaluate(value[2],value[3],operation[j]),value[0],operation[k]),operation[i])-24 == 0)
6179     {
6180         count++;
6181     }
6182 }
```

IF2211 Strategi Algoritma

```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - Tuclil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
6181     if(output == 1)
6182     {
6183         cout << value[1] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k]
6184         << value[0] << endl;
6185     }
6186
6187 else if(output == 2)
6188 {
6189     myFile << value[1] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")"
6190     << operation[k] << value[0] << ")" << endl;
6191 }
6192
6193 }
6194 if(evaluate(value[1],evaluate(value[2],evaluate(value[3],value[0],operation[k]),operation[j]),operation[i])-24 == 0)
6195 {
6196     count++;
6197     if(output == 1)
6198     {
6199         cout << value[1] << operation[i] << "(" << value[2] << operation[j] << "(" << value[3] << operation[k]
6200         << value[0] << ")" << endl;
6201     }
6202     else if(output == 2)
6203     {
6204         myFile << value[1] << operation[i] << "(" << value[2] << operation[j] << "(" << value[3] << operation[k]
6205         << value[0] << ")" << endl;
6206     }
6207
6208 }
6209 //Permutasi 11
6210 if(evaluate(evaluate(value[1],value[3],operation[i]),value[2],operation[j]),value[0],operation[k])-hasil == 0)
6211
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - Tuclil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
6212     count++;
6213     if(output == 1)
6214     {
6215         cout << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << value[2] << ")"
6216         << operation[k] << value[0] << endl;
6217     }
6218
6219 else if(output == 2)
6220 {
6221     myFile << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << value[2] << ")"
6222     << operation[k] << value[0] << endl;
6223 }
6224
6225 if(evaluate(evaluate(value[1],evaluate(value[3],value[2],operation[j]),operation[i]),value[0],operation[k])-hasil==0)
6226 {
6227     count++;
6228     if(output == 1)
6229     {
6230         cout << "(" << value[1] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")" << operation[k]
6231         << value[0] << endl;
6232     }
6233
6234     else if(output == 2)
6235     {
6236         myFile << "(" << value[1] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")" << operation[k]
6237         << value[0] << endl;
6238     }
6239
6240 }
```

IF2211 Strategi Algoritma

```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TUDIT_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
6241     if(evaluate(evaluate(value[1],value[3],operation[i]),evaluate(value[2],value[0],operation[k]),operation[j])-hasil == 0)
6242     {
6243         count++;
6244         if(output == 1)
6245         {
6246             cout << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << "(" << value[2] << operation[k]
6247             << value[0] << ")" << endl;
6248         }
6249         else if(output == 2)
6250         {
6251             myFile << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << "(" << value[2] << operation[k]
6252             << value[0] << ")" << endl;
6253         }
6254     }
6255
6256     if(evaluate(value[1],evaluate(evaluate(value[3],value[2],operation[j]),value[0],operation[k]),operation[i])-24 == 0)
6257     {
6258         count++;
6259         if(output == 1)
6260         {
6261             cout << value[1] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")" << operation[k]
6262             << value[0] << ")" << endl;
6263         }
6264         else if(output == 2)
6265         {
6266             myFile << value[1] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")" << operation[k]
6267             << value[0] << ")" << endl;
6268         }
6269     }
6270 }
6271
6272 }
6273 if(evaluate(value[1],evaluate(value[3],evaluate(value[2],value[0],operation[k]),operation[j]),operation[i])-24 == 0)
6274 {
6275     count++;
6276     if(output == 1)
6277     {
6278         cout << value[1] << operation[i] << "(" << value[3] << operation[j] << "(" << value[2] << operation[k]
6279             << value[0] << ")" << endl;
6280     }
6281     else if(output == 2)
6282     {
6283         myFile << value[1] << operation[i] << "(" << value[3] << operation[j] << "(" << value[2] << operation[k]
6284             << value[0] << ")" << endl;
6285     }
6286 }
6287
6288 //Permutasi 12
6289 if(evaluate(evaluate(value[1],value[3],operation[i]),value[0],operation[j]),value[2],operation[k])-hasil == 0)
6290 {
6291     count++;
6292     if(output == 1)
6293     {
6294         cout << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << value[0] << ")" << operation[k]
6295             << value[2] << endl;
6296     }
6297     else if(output == 2)
6298     {
6299         myFile << value[1] << operation[i] << value[3] << ")" << operation[j] << "(" << value[0] << ")" << operation[k]
6300             << value[2] << endl;
6301     }
6302 }
```

IF2211 Strategi Algoritma

```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TucilI_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const*[])
6301     myFile << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << value[0] << ")"
6302     << operation[k] << value[2] << endl;
6303 }
6304 }
6305 if(evaluate(evaluate(value[1],evaluate(value[3],value[0],operation[j]),operation[i]),value[2],operation[k])-hasil==0)
6306 {
6307     count++;
6308     if(output == 1)
6309     {
6310         cout << "(" << value[1] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")"
6311         << operation[k] << value[2] << endl;
6312     }
6313
6314 else if(output == 2)
6315 {
6316     myFile << "(" << value[1] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")"
6317     << operation[k] << value[2] << endl;
6318 }
6319
6320 }
6321 if(evaluate(evaluate(value[1],value[3],operation[i]),evaluate(value[0],value[2],operation[k]),operation[j])-hasil == 0)
6322 {
6323     count++;
6324     if(output == 1)
6325     {
6326         cout << "(" << value[1] << operation[i] << value[3] << ")"
6327         << operation[j] << "(" << value[0]
6328         << operation[k] << value[2] << ")" << endl;
6329     }
6330     else if(output == 2)
6331     {
6332         myFile << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << "(" << value[0]
6333         << operation[k] << value[2] << ")" << endl;
6334     }
6335 }
6336 }
6337 if(evaluate(value[1],evaluate(evaluate(value[3],value[0],operation[j]),value[2],operation[k]),operation[i])-24 == 0)
6338 {
6339     count++;
6340     if(output == 1)
6341     {
6342         cout << value[1] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")"
6343         << operation[k] << value[2] << ")" << endl;
6344     }
6345
6346 else if(output == 2)
6347 {
6348     myFile << value[1] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")"
6349     << operation[k] << value[2] << ")" << endl;
6350 }
6351 }
6352 }
6353 if(evaluate(value[1],evaluate(value[3],evaluate(value[0],value[2],operation[k]),operation[j]),operation[i])-24 == 0)
6354 {
6355     count++;
6356     if(output == 1)
6357     {
6358         cout << value[1] << operation[i] << "(" << value[3] << operation[j] << "(" << value[0]
6359         << operation[k] << value[2] << ")" << endl;
6360     }
6361 }
```

File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TucilI_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const*[])
6331 {
6332 myFile << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << "(" << value[0]
6333 << operation[k] << value[2] << ")" << endl;
6334 }
6335
6336 }
6337 if(evaluate(value[1],evaluate(evaluate(value[3],value[0],operation[j]),value[2],operation[k]),operation[i])-24 == 0)
6338 {
6339 count++;
6340 if(output == 1)
6341 {
6342 cout << value[1] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")"
6343 << operation[k] << value[2] << ")" << endl;
6344 }
6345
6346 else if(output == 2)
6347 {
6348 myFile << value[1] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")"
6349 << operation[k] << value[2] << ")" << endl;
6350 }
6351 }
6352 }
6353 if(evaluate(value[1],evaluate(value[3],evaluate(value[0],value[2],operation[k]),operation[j]),operation[i])-24 == 0)
6354 {
6355 count++;
6356 if(output == 1)
6357 {
6358 cout << value[1] << operation[i] << "(" << value[3] << operation[j] << "(" << value[0]
6359 << operation[k] << value[2] << ")" << endl;
6360 }
6361 }

```

24GameSolver.cpp

src > 24GameSolver.cpp > main(int, char const *[])
6361
6362     else if(output == 2)
6363     {
6364         myFile << value[1] << operation[i] << "(" << value[3] << operation[j] << "(" << value[0]
6365         << operation[k] << value[2] << ")" << endl;
6366     }
6367
6368 }
6369 //Permutasi 19
6370 if(evaluate(evaluate(evaluate(value[3],value[0],operation[i]),value[1],operation[j]),value[2],operation[k])-hasil == 0)
6371 {
6372     count++;
6373     if(output == 1)
6374     {
6375         cout << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << value[1] << ")"
6376         << operation[k] << value[2] << endl;
6377     }
6378     else if(output == 2)
6379     {
6380         myFile << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << value[1] << ")"
6381         << operation[k] << value[2] << endl;
6382     }
6383 }
6384 if(evaluate(evaluate(value[3],evaluate(value[0],value[1],operation[j]),operation[1]),value[2],operation[k])-hasil==0)
6385 {
6386     count++;
6387     if(output == 1)
6388     {
6389         cout << "(" << value[3] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
6390         << operation[k] << value[2] << endl;
6391 }
6392     else if(output == 2)
6393     {
6394         myFile << "(" << value[3] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
6395         << operation[k] << value[2] << ")" << endl;
6396     }
6397 }
6398 }
6399 if(evaluate(evaluate(value[3],value[0],operation[1]),evaluate(value[1],value[2],operation[k]),operation[j])-hasil == 0)
6400 {
6401     count++;
6402     if(output == 1)
6403     {
6404         cout << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << "(" << value[1]
6405         << operation[k] << value[2] << ")" << endl;
6406     }
6407     else if(output == 2)
6408     {
6409         myFile << "(" << value[3] << operation[i] << value[0] << ")" << operation[j] << "(" << value[1]
6410         << operation[k] << value[2] << ")" << endl;
6411     }
6412 }
6413 }
6414 if(evaluate(value[3],evaluate(evaluate(value[0],value[1],operation[j]),value[2],operation[k]),operation[i])-24 == 0)
6415 {
6416     count++;
6417     if(output == 1)
6418     {
6419         cout << value[3] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
6420         << operation[k] << value[2] << ")" << endl;
6421 }
6422 }

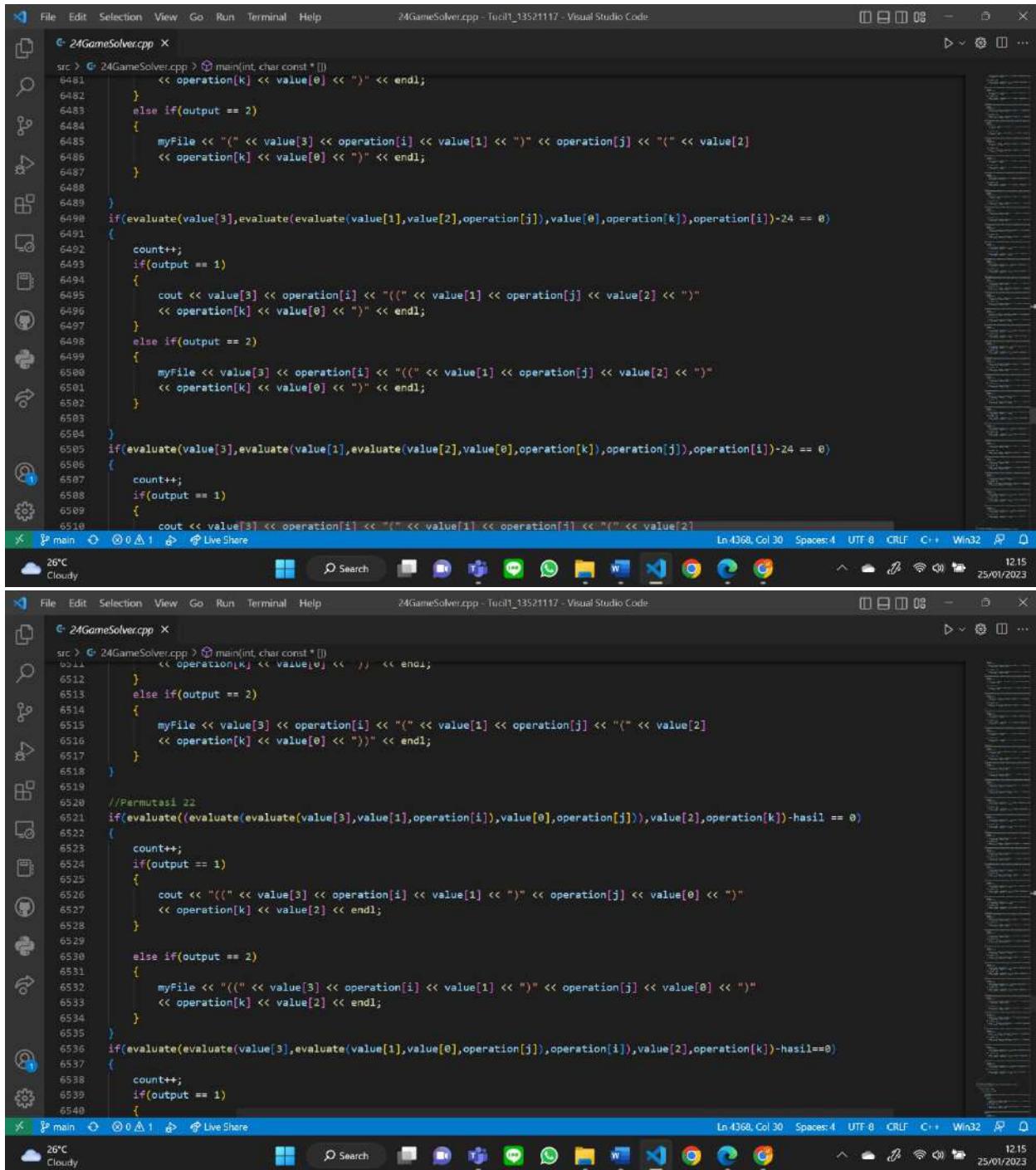
```

```

File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - Tcull1_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
6421     }
6422     else if(output == 2)
6423     {
6424         myFile << value[3] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
6425         << operation[k] << value[2] << ")" << endl;
6426     }
6427 }
6428 }
6429 if(evaluate(value[3],evaluate(value[0],evaluate(value[1],value[2],operation[k]),operation[j]),operation[i])-24 == 0)
6430 {
6431     count++;
6432     if(output == 1)
6433     {
6434         cout << value[3] << operation[i] << "(" << value[0] << operation[j] << "(" << value[1]
6435         << operation[k] << value[2] << ")" << endl;
6436     }
6437     else if(output == 2)
6438     {
6439         myFile << value[3] << operation[i] << "(" << value[0] << operation[j] << "(" << value[1]
6440         << operation[k] << value[2] << ")" << endl;
6441     }
6442 }
6443 }
//Permutasi 21
6445 if(evaluate(evaluate(evaluate(value[3],value[1],operation[i]),value[2],operation[j]),value[0],operation[k])-hasil == 0)
6446 {
6447     count++;
6448     if(output == 1)
6449     {
6450         cout << "(" << value[3] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")"
6451         << operation[k] << value[0] << endl;
6452     }
6453     else if(output == 2)
6454     {
6455         myFile << "(" << value[3] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")"
6456         << operation[k] << value[0] << endl;
6457     }
6458 }
6459 }
6460 if(evaluate(evaluate(value[3],evaluate(value[1],value[2],operation[j]),operation[i]),value[0],operation[k])-hasil==0)
6461 {
6462     count++;
6463     if(output == 1)
6464     {
6465         cout << "(" << value[3] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")"
6466         << operation[k] << value[0] << endl;
6467     }
6468     else if(output == 2)
6469     {
6470         myFile << "(" << value[3] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")"
6471         << operation[k] << value[0] << endl;
6472     }
6473 }
6474 }
6475 if(evaluate(evaluate(value[3],value[1],operation[i]),evaluate(value[2],value[0],operation[k]),operation[j])-hasil == 0)
6476 {
6477     count++;
6478     if(output == 1)
6479     {
6480         cout << "(" << value[3] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2]

```

IF2211 Strategi Algoritma



```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const*[])
6481     << operation[k] << value[0] << ")" << endl;
6482 }
6483 else if(output == 2)
{
    myFile << "(" << value[3] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2]
    << operation[k] << value[0] << ")" << endl;
6487 }
6488 }
6489 if(evaluate(value[3],evaluate(evaluate(value[1],value[2],operation[j]),value[0],operation[k]),operation[i])-24 == 0)
6490 {
    count++;
    if(output == 1)
    {
        cout << value[3] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")"
        << operation[k] << value[0] << ")" << endl;
6497 }
    else if(output == 2)
    {
        myFile << value[3] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")"
        << operation[k] << value[0] << ")" << endl;
6502 }
6503 }
6504 if(evaluate(value[3],evaluate(value[1],evaluate(value[2],value[0],operation[k]),operation[j]),operation[i])-24 == 0)
6505 {
    count++;
    if(output == 1)
    {
        cout << value[3] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2]
6510                                         Ln 4368, Col 30   Spaces:4   UTF-8   CRLF   C++   Win32   ⌂
26°C Cloudy
12.15
25/01/2023
Live Share
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const*[])
6511     << operation[k] << value[0] << ")" << endl;
6512 }
6513 else if(output == 2)
{
    myFile << value[3] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2]
6515     << operation[k] << value[0] << ")" << endl;
6517 }
6518 }
6519 //Permutasi 22
6520 if(evaluate((evaluate(evaluate(value[3],value[1],operation[i]),value[0],operation[j])),value[2],operation[k])-hasil == 0)
6521 {
    count++;
    if(output == 1)
    {
        cout << "(" << value[3] << operation[i] << value[1] << ")" << operation[j] << value[0] << ")"
        << operation[k] << value[2] << endl;
6527 }
6528 else if(output == 2)
{
    myFile << "(" << value[3] << operation[i] << value[1] << ")" << operation[j] << value[0] << ")"
        << operation[k] << value[2] << endl;
6533 }
6534 }
6535 if(evaluate(evaluate(value[3],evaluate(value[1],value[0],operation[j]),operation[i]),value[2],operation[k])-hasil==0)
6536 {
    count++;
    if(output == 1)
    {
        cout << "(" << value[3] << operation[i] << value[1] << ")" << operation[j] << value[0] << ")"
        << operation[k] << value[2] << endl;
6540 }
6541 }
6542                                         Ln 4368, Col 30   Spaces:4   UTF-8   CRLF   C++   Win32   ⌂
26°C Cloudy
12.15
25/01/2023
Live Share
```

```

File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - Tuclil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const[])
6541     cout << "(" << value[3] << operation[i] << "(" << value[1] << operation[j] << value[0] << ")"
6542         << operation[k] << value[2] << endl;
6543     }
6544     else if(output == 2)
6545     {
6546         myFile << "(" << value[3] << operation[i] << "(" << value[1] << operation[j] << value[0] << ")"
6547             << operation[k] << value[2] << endl;
6548     }
6549 }
6550
6551 if(evaluate(evaluate(value[3],value[1],operation[1]),evaluate(value[0],value[2],operation[k]),operation[j])-hasil == 0)
6552 {
6553     count++;
6554     if(output == 1)
6555     {
6556         cout << "(" << value[3] << operation[i] << value[1] << ")" << operation[j] << "(" << value[0]
6557             << operation[k] << value[2] << ")" << endl;
6558     }
6559     else if(output == 2)
6560     {
6561         myFile << "(" << value[3] << operation[i] << value[1] << ")" << operation[j] << "(" << value[0]
6562             << operation[k] << value[2] << ")" << endl;
6563     }
6564
6565 }
6566 if(evaluate(value[3],evaluate(evaluate(value[1],value[0],operation[j]),value[2],operation[k]),operation[i])-24 == 0)
6567 {
6568     count++;
6569     if(output == 1)
6570     {
6571         cout << value[3] << operation[i] << "(" << value[1] << operation[j] << value[0] << ")"
6572             << operation[k] << value[2] << ")" << endl;
6573     }
6574     else if(output == 2)
6575     {
6576         myFile << value[3] << operation[i] << "(" << value[1] << operation[j] << value[0] << ")"
6577             << operation[k] << value[2] << ")" << endl;
6578     }
6579 }
6580
6581 if(evaluate(value[3],evaluate(value[1],evaluate(value[0],value[2],operation[k]),operation[j]),operation[i])-24 == 0)
6582 {
6583     count++;
6584     if(output == 1)
6585     {
6586         cout << value[3] << operation[i] << "(" << value[1] << operation[j] << "(" << value[0]
6587             << operation[k] << value[2] << ")" << endl;
6588     }
6589     else if(output == 2)
6590     {
6591         myFile << value[3] << operation[i] << "(" << value[1] << operation[j] << "(" << value[0]
6592             << operation[k] << value[2] << ")" << endl;
6593     }
6594
6595 }
6596
6597
6598
6599
6600

```

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```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
6602:     value[1] dan value[3] sama
6603:     se if(value[1] == value[3] && value[2] != value[1] && value[3] != value[1])
6604:
6605:     for(int i = 0; i < 4; i++)
6606:     {
6607:         for(int j = 0; j < 4; j++)
6608:         {
6609:             for(int k = 0; k < 4; k++)
6610:             {
6611:                 //Permutasi 1
6612:                 if(evaluate(evaluate(value[0],value[1],operation[i]),value[2],operation[j]),value[3],operation[k])-hasil == 0)
6613:                 {
6614:                     count++;
6615:                     if(output == 1)
6616:                     {
6617:                         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")" <<
6618:                         operation[k] << value[3] << endl;
6619:                     }
6620:                     else if(output == 2)
6621:                     {
6622:                         myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")" <<
6623:                         operation[k] << value[3] << endl;
6624:                     }
6625:                 }
6626:
6627:             }
6628:             if(evaluate(evaluate(value[0],evaluate(value[1],value[2],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
6629:             {
6630:
6631:                 count++;
6632:                 if(output == 1)
6633:                 {
6634:                     cout << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" <<
6635:                         operation[k] << value[3] << endl;
6636:                 }
6637:                 else if(output == 2)
6638:                 {
6639:                     myFile << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" <<
6640:                         operation[k] << value[3] << endl;
6641:                 }
6642:
6643:             if(evaluate(evaluate(value[0],value[1],operation[i]),evaluate(value[2],value[3],operation[k]),operation[j])-hasil == 0)
6644:             {
6645:                 count++;
6646:                 if(output == 1)
6647:                 {
6648:                     cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2] << operation[k]
6649:                         << value[3] << ")" << endl;
6650:                 }
6651:                 else if (output == 2)
6652:                 {
6653:                     myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2]
6654:                         << operation[k] << value[3] << ")" << endl;
6655:                 }
6656:             }
6657:             if(evaluate(value[0],evaluate(evaluate(value[1],value[2],operation[j]),value[3],operation[k]),operation[i])-hasil == 0)
6658:             {
6659:                 count++;
6660:                 if(output == 1)
6661:
6662:             }
6663:         }
6664:     }
6665: }
```

IF2211 Strategi Algoritma

```
24GameSolver.cpp
```

```
src > 24GameSolver.cpp > main(int, char const *[])
6661 {
6662     cout << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" << operation[k] <<
6663     value[3] << endl;
6664 }
6665 else if(output == 2)
6666 {
6667     myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" << operation[k] <<
6668     value[3] << endl;
6669 }
6670
6671 }
6672 if(evaluate(value[0],evaluate(value[1],evaluate(value[2],value[3],operation[k]),operation[j]),operation[i])-hasil == 0)
6673 {
6674     count++;
6675     if(output == 1)
6676     {
6677         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2] << operation[k] <<
6678         value[3] << ")" << endl;
6679     }
6680     else if(output == 2)
6681     {
6682         myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2] << operation[k] <<
6683         value[3] << ")" << endl;
6684     }
6685 }
6686
6687 }
6688 //Permutasi 2
6689 if(evaluate(evaluate(value[0],value[1],operation[i]),value[3],operation[j]),value[2],operation[k])-
6690 hasil == 0)
```

```
24GameSolver.cpp
```

```
src > 24GameSolver.cpp > main(int, char const *[])
6691 {
6692     count++;
6693     if(output == 1)
6694     {
6695         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[3] << ")" << operation[k] <<
6696         value[2] << endl;
6697     }
6698     else if(output == 2)
6699     {
6700         myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[3] << ")" << operation[k] <<
6701         value[2] << endl;
6702     }
6703 }
6704
6705 }
6706 if(evaluate(value[0],evaluate(value[1],value[3],operation[j]),operation[i]),value[2],operation[k])-hasil==0)
6707 {
6708     count++;
6709     if(output == 1)
6710     {
6711         cout << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] <<
6712         value[2] << endl;
6713     }
6714     else if(output == 2)
6715     {
6716         myFile << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] <<
6717         value[2] << endl;
6718     }
6719 }
6720
```

IF2211 Strategi Algoritma

```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const *[])
6721 }
6722 if(evaluate(evaluate(value[0],value[1],operation[i]),evaluate(value[3],value[2],operation[k]),operation[j])-hasil == 0)
6723 {
6724     count++;
6725     if(output == 1)
6726     {
6727         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[3] << operation[k] <<
6728             value[2] << ")" << endl;
6729     }
6730     else if(output == 2)
6731     {
6732         myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[3] << operation[k] <<
6733             value[2] << ")" << endl;
6734     }
6735 }
6736 }
6737 if(evaluate(value[0],evaluate(evaluate(value[1],value[3],operation[j]),value[2],operation[k]),operation[i])-24 == 0)
6738 {
6739     count++;
6740     if(output == 1)
6741     {
6742         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] <<
6743             value[2] << ")" << endl;
6744     }
6745     else if(output == 2)
6746     {
6747         myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" << operation[k] <<
6748             value[2] << ")" << endl;
6749     }
6750 }
6751 }
6752 }
6753 if(evaluate(value[0],evaluate(value[1],evaluate(value[3],value[2],operation[k]),operation[j]),operation[i])-24 == 0)
6754 {
6755     count++;
6756     if(output == 1)
6757     {
6758         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[3] << operation[k] <<
6759             value[2] << ")" << endl;
6760     }
6761     else if(output == 2)
6762     {
6763         myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[3] << operation[k] <<
6764             value[2] << ")" << endl;
6765     }
6766 }
6767 }
6768 }
6769 //Permutasi 3
6770 if(evaluate((evaluate(evaluate(value[0],value[2],operation[i]),value[1],operation[j])),value[3],operation[k])-hasil == 0)
6771 {
6772     count++;
6773     if(output == 1)
6774     {
6775         cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[1] << ")" << operation[k] <<
6776             value[3] << endl;
6777     }
6778     else if(output == 2)
6779     {
6780         myFile << value[0] << operation[i] << value[2] << "(" << operation[j] << value[1] << ")" << operation[k] <<
6781             value[3] << endl;
6782     }
6783 }
```

IF2211 Strategi Algoritma

The image displays two side-by-side instances of the Visual Studio Code editor, both showing the same C++ file: 24GameSolver.cpp. The file contains code related to solving the 24 game.

The code uses arrays `value` and `operation` of size 4, and variables `myFile`, `count`, `output`, and `hasil`. It includes logic to evaluate different combinations of operations and values to reach a result of 24.

```
src > 24GameSolver.cpp > main(int, char const *[])
6781     {
6782         myFile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[1] << ")" << operation[k] <<
6783         value[3] << endl;
6784     }
6785 }
6786 if(evaluate(evaluate(value[0]),evaluate(value[2],value[1],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
6787 {
6788     count++;
6789     if(output == 1)
6790     {
6791         cout << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k] <<
6792         value[3] << endl;
6793     }
6794     else if(output == 2)
6795     {
6796         myFile << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k]
6797         << value[3] << endl;
6798     }
6799 }
6800 }
6801 if(evaluate(evaluate(value[0],value[2],operation[i]),evaluate(value[1],value[3],operation[k]),operation[j])-hasil == 0)
6802 {
6803     count++;
6804     if(output == 1)
6805     {
6806         cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[1] << operation[k]
6807         << value[3] << ")" << endl;
6808     }
6809 }
6810 }
```

The second instance of the file shows similar code but with different logic, likely for calculating the result of operations:

```
src > 24GameSolver.cpp > main(int, char const *[])
6811     else if(output == 2)
6812     {
6813         myFile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[1] << operation[k]
6814         << value[3] << ")" << endl;
6815 }
6816 }
6817 if(evaluate(value[0],evaluate(evaluate(value[2],value[1],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
6818 {
6819     count++;
6820     if(output == 1)
6821     {
6822         cout << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k]
6823         << value[3] << ")" << endl;
6824     }
6825     else if(output == 2)
6826     {
6827         myFile << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k] <<
6828         value[3] << ")" << endl;
6829     }
6830 }
6831 if(evaluate(value[0],evaluate(value[2],evaluate(value[1],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
6832 {
6833     count++;
6834     if(output == 1)
6835     {
6836         cout << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[1] << operation[k] <<
6837         value[3] << ")" << endl;
6838     }
6839 }
6840 }
```

IF2211 Strategi Algoritma

```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - Tuclit_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
6841     myFile << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[1] << operation[k] <<
6842     value[3] << ")" << endl;
6843 }
6844 }
6845 }
6846 //Permutasi ?
6847 if(evaluate(evaluate(value[1],value[0],operation[i]),value[2],operation[j]),value[3],operation[k])-hasil == 0)
6848 {
6849     count++;
6850     if(output == 1)
6851     {
6852         cout << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << value[2] << ")"
6853         << operation[k] << value[3] << endl;
6854     }
6855
6856 else if(output == 2)
6857 {
6858     myFile << "(" << value[1] << value[0] << ")" << operation[j] << value[2] << ")"
6859     << operation[k] << value[3] << endl;
6860 }
6861
6862 }
6863 if(evaluate(evaluate(value[1],evaluate(value[0],value[2],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
6864
6865 {
6866     count++;
6867     if(output == 1)
6868     {
6869         cout << "(" << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")" << operation[k]
6870         << value[3] << endl;
6871 }
6872
6873 else if(output == 2)
6874 {
6875     myFile << "(" << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")"
6876     << operation[k] << value[3] << endl;
6877 }
6878
6879 }
6880 if(evaluate(evaluate(value[1],value[0],operation[i]),evaluate(value[2],value[3],operation[k]),operation[j])-hasil == 0)
6881 {
6882     count++;
6883     if(output == 1)
6884     {
6885         cout << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << "(" << value[2]
6886         << operation[k] << value[3] << ")" << endl;
6887 }
6888
6889 else if(output == 2)
6890 {
6891     myFile << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << "(" << value[2]
6892         << operation[k] << value[3] << ")" << endl;
6893 }
6894
6895 }
6896 if(evaluate(value[1],evaluate(evaluate(value[0],value[2],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
6897 {
6898     count++;
6899     if(output == 1)
6900 }
```

```

File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
6961     cout << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")" << operation[k]
6962     << value[3] << endl;
6963 }
6964
6965 else if(output == 2)
6966 {
6967     myFile << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")" << operation[k]
6968     << value[3] << endl;
6969 }
6970
6971 }
6972 if(evaluate(value[1],evaluate(value[0],evaluate(value[2],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
6973 {
6974     count++;
6975     if(output == 1)
6976     {
6977         cout << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[2] << operation[k]
6978         << value[3] << ")" << endl;
6979     }
6980
6981 else if(output == 2)
6982 {
6983     myFile << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[2] << operation[k]
6984         << value[3] << ")" << endl;
6985 }
6986
6987 //Permutasi R
6988 if(evaluate((evaluate(evaluate(value[1],value[0],operation[i]),value[3],operation[j]),value[2],operation[k])-hasil == 0)
6989
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
6931
6932     count++;
6933     if(output == 1)
6934     {
6935
6936         cout << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << value[3] << ")" << operation[k]
6937         << value[2] << endl;
6938
6939
6940     else if(output == 2)
6941     {
6942         myFile << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << value[3] << ")" << operation[k]
6943         << value[2] << endl;
6944
6945
6946 }
6947 if(evaluate(evaluate(value[1],evaluate(value[0],value[3],operation[j],operation[i]),value[2],operation[k])-hasil==0)
6948 {
6949     count++;
6950     if(output == 1)
6951     {
6952         cout << "(" << value[1] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")" << operation[k]
6953         << value[2] << endl;
6954
6955
6956     else if(output == 2)
6957     {
6958         myFile << "(" << value[1] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")" << operation[k]
6959         << value[2] << endl;
6960

```

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The screenshot shows the Visual Studio Code interface with the following details:

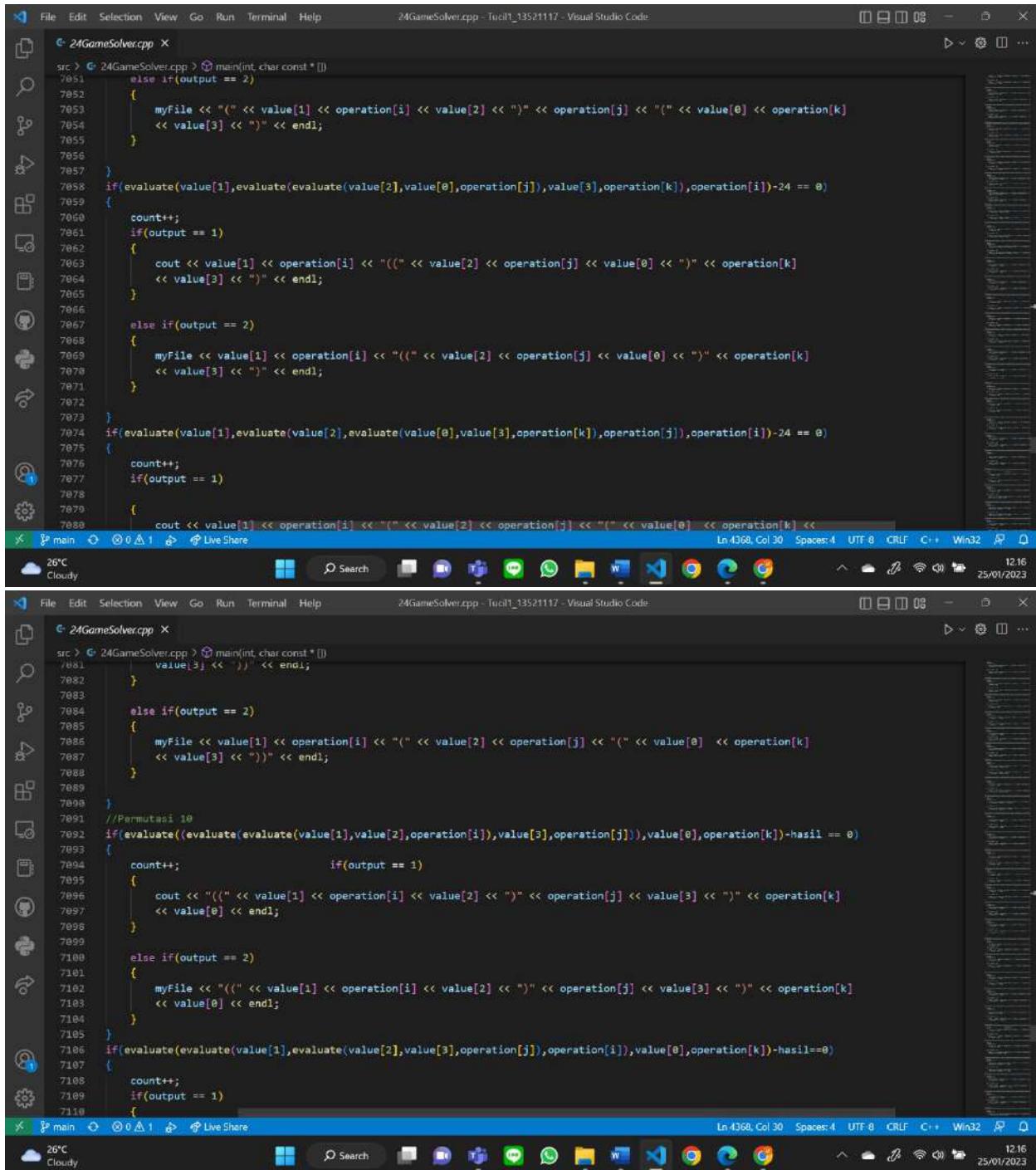
- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Title Bar:** 24GameSolver.cpp - TUDIT_13521117 - Visual Studio Code
- Code Editor:** The main area displays C++ code for a 24 Game solver. The code uses nested loops and if statements to evaluate different combinations of four numbers (value[0], value[1], value[2], value[3]) using three operations (operation[i], operation[j], operation[k]). It checks for two cases: a result of 24 or a result of 0. The code includes cout statements for output and myFile statements for writing to a file. Lines 6961 to 6998 are visible.
- Status Bar:** In 4368, Col 30, UTF-8, CRLF, C++, Win32, 12.16, 25/01/2023.
- Bottom Icons:** Includes icons for Cloudy weather, Live Share, and other system functions.

IF2211 Strategi Algoritma

```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TucilI_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
6991 }
6992 }
6993 }
6994 if(evaluate(value[1],evaluate(value[0],evaluate(value[3],value[2],operation[k]),operation[j]),operation[i])-24 == 0)
6995 {
6996     count++;
6997     if(output == 1)
6998     {
6999         cout << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[3] << operation[k]
7000             << value[2] << ")" ) << endl;
7001     }
7002 else if(output == 2)
7003 {
7004     myFile << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[3] << operation[k]
7005             << value[2] << ")" ) << endl;
7006 }
7007 }
7008 }
7009 }
7010 //Permutasi 9
7011 if(evaluate(evaluate(value[1],value[2],operation[i]),value[0],operation[j]),value[3],operation[k])-hasil == 0)
7012 {
7013     count++;
7014     if(output == 1)
7015     {
7016         cout << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << value[0] << ")" << operation[k]
7017             << value[3] << endl;
7018     }
7019 else if(output == 2)
7020 {
7021     myFile << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << value[0] << ")" << operation[k]
7022             << value[3] << endl;
7023 }
7024 }
7025 }
7026 if(evaluate(evaluate(value[1],evaluate(value[2],value[0],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
7027 {
7028     count++;
7029     if(output == 1)
7030     {
7031         cout << "(" << value[1] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")" ) << operation[k]
7032             << value[3] << endl;
7033     }
7034 else if(output == 2)
7035     {
7036         myFile << "(" << value[1] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")" ) << operation[k]
7037             << value[3] << endl;
7038     }
7039 }
7040 }
7041 }
7042 if(evaluate(evaluate(value[1],value[2],operation[i]),evaluate(value[0],value[3],operation[k]),operation[j])-hasil == 0)
7043 {
7044     count++;
7045     if(output == 1)
7046     {
7047         cout << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << "(" << value[0] << operation[k]
7048             << value[3] << ")" << endl;
7049     }
7050 }
7051 }

File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TucilI_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
7821 {
7822     myFile << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << value[0] << ")" << operation[k]
7823         << value[3] << endl;
7824 }
7825 }
7826 if(evaluate(evaluate(value[1],evaluate(value[2],value[0],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
7827 {
7828     count++;
7829     if(output == 1)
7830     {
7831         cout << "(" << value[1] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")" ) << operation[k]
7832             << value[3] << endl;
7833     }
7834 else if(output == 2)
7835     {
7836         myFile << "(" << value[1] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")" ) << operation[k]
7837             << value[3] << endl;
7838     }
7839 }
7840 }
7841 }
7842 if(evaluate(evaluate(value[1],value[2],operation[i]),evaluate(value[0],value[3],operation[k]),operation[j])-hasil == 0)
7843 {
7844     count++;
7845     if(output == 1)
7846     {
7847         cout << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << "(" << value[0] << operation[k]
7848             << value[3] << ")" << endl;
7849     }
7850 }
```

IF2211 Strategi Algoritma



```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const *[])
7851     else if(output == 2)
7852     {
7853         myFile << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << "(" << value[0] << operation[k]
7854             << value[3] << ")" << endl;
7855     }
7856
7857 }
7858 if(evaluate(value[1],evaluate(evaluate(value[2],value[0],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
7859 {
7860     count++;
7861     if(output == 1)
7862     {
7863         cout << value[1] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")" << operation[k]
7864             << value[3] << ")" << endl;
7865     }
7866
7867     else if(output == 2)
7868     {
7869         myFile << value[1] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")" << operation[k]
7870             << value[3] << ")" << endl;
7871     }
7872
7873 }
7874 if(evaluate(value[1],evaluate(value[2],evaluate(value[0],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
7875 {
7876     count++;
7877     if(output == 1)
7878     {
7879         cout << value[1] << operation[i] << "(" << value[2] << operation[j] << "(" << value[0] << operation[k] <<
7880             value[3] << ")" << endl;
7881     }
7882 }
7883
7884 else if(output == 2)
7885 {
7886     myFile << value[1] << operation[i] << "(" << value[2] << operation[j] << "(" << value[0] << operation[k]
7887             << value[3] << ")" << endl;
7888 }
7889
7890 }
7891 //Permutasi 10
7892 if(evaluate(evaluate(evaluate(value[1],value[2],operation[i]),value[3],operation[j]),value[0],operation[k])-hasil == 0)
7893 {
7894     count++;           if(output == 1)
7895     {
7896         cout << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << value[3] << ")" << operation[k]
7897             << value[0] << endl;
7898     }
7899
7900     else if(output == 2)
7901     {
7902         myFile << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << value[3] << ")" << operation[k]
7903             << value[0] << endl;
7904     }
7905
7906     if(evaluate(evaluate(value[1],evaluate(value[2],value[3],operation[j]),operation[i]),value[0],operation[k])-hasil==0)
7907     {
7908         count++;           if(output == 1)
7909         {
7910             cout << value[1] << operation[i] << value[2] << operation[j] << "(" << value[3] << ")" << operation[k]
7911                 << value[0] << endl;
7912
7913     }
7914 }
```

```

File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TUDIT_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const[])
7111 cout << "(" << value[1] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k]
7112 << value[0] << endl;
7113 }
7114
7115 else if(output == 2)
7116 {
    myFile << "(" << value[1] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k]
7117     << value[0] << endl;
7118 }
7119
7120
7121 }
7122 if(evaluate(evaluate(value[1],value[2],operation[i]),evaluate(value[3],value[0],operation[k]),operation[j])-hasil == 0)
7123 {
    count++;
    if(output == 1)
    {
        cout << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << "(" << value[3] <<
        operation[k] << value[0] << ")" << endl;
    }
7124
7125 else if(output == 2)
7126 {
    myFile << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << "(" << value[3] <<
    operation[k] << value[0] << ")" << endl;
}
7127
7128
7129
7130
7131
7132
7133
7134
7135
7136
7137 if(evaluate(value[1],evaluate(evaluate(value[2],value[3],operation[j]),value[0],operation[k]),operation[i])-24 == 0)
7138 {
    count++;
    if(output == 1)
7139
7140
7141 cout << value[1] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k]
7142 << value[0] << ")" << endl;
7143
7144
7145
7146 else if(output == 2)
7147 {
    myFile << value[1] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" <<
    operation[k] << value[0] << ")" << endl;
}
7148
7149
7150
7151
7152
7153 if(evaluate(value[1],evaluate(value[2],evaluate(value[3],value[0],operation[k]),operation[j]),operation[i])-24 == 0)
7154 {
    count++;
    if(output == 1)
    {
        cout << value[1] << operation[i] << "(" << value[2] << operation[j] << "(" << value[3] << operation[k]
7155 << value[0] << ")" << endl;
    }
7156
7157 else if(output == 2)
7158 {
    myFile << value[1] << operation[i] << "(" << value[2] << operation[j] << "(" << value[3] << operation[k]
7159 << value[0] << ")" << endl;
}
7160
7161
7162
7163 //Permutasi 11
7164 if(evaluate((evaluate(evaluate(value[1],value[3],operation[i]),value[2],operation[j])),value[0],operation[k])-hasil == 0)
7165
7166
7167
7168
7169
7170

```

26°C Cloudy 12.17 25/01/2023

File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TUDIT_13521117 - Visual Studio Code

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IF2211 Strategi Algoritma

```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
711 count++;
712 if(output == 1)
713 {
714     cout << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << value[2] << ")"
715     << operation[k] << value[0] << endl;
716 }
717
718 else if(output == 2)
719 {
720     myFile << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << value[2] << ")"
721     << operation[k] << value[0] << endl;
722 }
723
724 if(evaluate(evaluate(value[1]),evaluate(value[3],value[2],operation[j]),operation[i]),value[0],operation[k])-hasil==0)
725 {
726     count++;
727     if(output == 1)
728     {
729         cout << "(" << value[1] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")" << operation[k]
730         << value[0] << endl;
731     }
732
733     else if(output == 2)
734     {
735         myFile << "(" << value[1] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")" << operation[k]
736         << value[0] << endl;
737     }
738 }
739
740 if(evaluate(evaluate(value[1],value[3],operation[i]),evaluate(value[2],value[0],operation[k]),operation[j])-hasil == 0)
741 {
742     count++;
743     if(output == 1)
744     {
745         cout << value[1] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")" << operation[k]
746         << value[0] << endl;
747     }
748
749     else if(output == 2)
750     {
751         myFile << value[1] << operation[i] << "(" << value[3] << operation[j] << value[2] << ")" << operation[k]
752         << value[0] << endl;
753     }
754 }
```

IF2211 Strategi Algoritma

```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
7231 }
7232 if(evaluate(value[1],evaluate(value[3],evaluate(value[2],value[0],operation[k]),operation[j]),operation[i])-24 == 0)
7233 {
7234     count++;
7235     if(output == 1)
7236     {
7237         cout << value[1] << operation[i] << "(" << value[3] << operation[j] << "(" << value[2] << operation[k]
7238             << value[0] << ")" << endl;
7239     }
7240     else if(output == 2)
7241     {
7242         myFile << value[1] << operation[i] << "(" << value[3] << operation[j] << "(" << value[2] << operation[k]
7243             << value[0] << ")" << endl;
7244     }
7245 }
7246 //Permutasi 12
7247 if(evaluate(evaluate(value[1],value[3],operation[i]),value[0],operation[j]),value[2],operation[k])-hasil == 0)
7248 {
7249     count++;
7250     if(output == 1)
7251     {
7252         cout << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << value[0] << ")"
7253             << operation[k] << endl;
7254     }
7255     else if(output == 2)
7256     {
7257         myFile << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << value[0] << ")"
7258             << endl;
7259     }
7260 }
7261 << operation[k] << value[2] << endl;
7262 }
7263 }
7264 if(evaluate(evaluate(value[1],evaluate(value[3],value[0],operation[j]),operation[i]),value[2],operation[k])-hasil==0)
7265 {
7266     count++;
7267     if(output == 1)
7268     {
7269         cout << "(" << value[1] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")"
7270             << operation[k] << value[2] << endl;
7271     }
7272     else if(output == 2)
7273     {
7274         myFile << "(" << value[1] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")"
7275             << operation[k] << value[2] << endl;
7276     }
7277 }
7278 }
7279 }
7280 if(evaluate(evaluate(value[1],value[3],operation[i]),evaluate(value[0],value[2],operation[k]),operation[j])-hasil == 0)
7281 {
7282     count++;
7283     if(output == 1)
7284     {
7285         cout << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << "(" << value[0]
7286             << operation[k] << value[2] << ")" << endl;
7287     }
7288     else if(output == 2)
7289     {
7290         myFile << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << "(" << value[0]
7291             << operation[k] << value[2] << ")" << endl;
7292     }
7293 }
7294 }
7295 
```

File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
7261 }
7262 }
7263 }
7264 if(evaluate(evaluate(value[1],evaluate(value[3],value[0],operation[j]),operation[i]),value[2],operation[k])-hasil==0)
7265 {
7266 count++;
7267 if(output == 1)
7268 {
7269 cout << "(" << value[1] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")"
7270 << operation[k] << value[2] << endl;
7271 }
7272 else if(output == 2)
7273 {
7274 myFile << "(" << value[1] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")"
7275 << operation[k] << value[2] << endl;
7276 }
7277 }
7278 }
7279 }
7280 if(evaluate(evaluate(value[1],value[3],operation[i]),evaluate(value[0],value[2],operation[k]),operation[j])-hasil == 0)
7281 {
7282 count++;
7283 if(output == 1)
7284 {
7285 cout << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << "(" << value[0]
7286 << operation[k] << value[2] << ")" << endl;
7287 }
7288 else if(output == 2)
7289 {
7290 myFile << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << "(" << value[0]
7291 << operation[k] << value[2] << ")" << endl;
7292 }
7293 }
7294 }
7295

```

File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > @ main(int, char const *[])
7291     myfile << "(" << value[1] << operation[i] << value[3] << ")" << operation[j] << "(" << value[0]
7292         << operation[k] << value[2] << ")" << endl;
7293     }
7294 }
7295 if(evaluate(value[1],evaluate(evaluate(value[3],value[0],operation[j]),value[2],operation[k]),operation[i])-24 == 0)
7296 {
    count++;
    if(output == 1)
    {
        cout << value[1] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")"
        << operation[k] << value[2] << ")" << endl;
    }
    else if(output == 2)
    {
        myfile << value[1] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")"
        << operation[k] << value[2] << ")" << endl;
    }
}
7311 if(evaluate(value[1],evaluate(value[3],evaluate(value[0],value[2],operation[k]),operation[j]),operation[i])-24 == 0)
7312 {
    count++;
    if(output == 1)
    {
        cout << value[1] << operation[i] << "(" << value[3] << operation[j] << "(" << value[0]
        << operation[k] << value[2] << ")" << endl;
    }
}
7313
7314
7315
7316
7317
7318
7319
7320
7321
7322
7323
7324
7325
7326
7327
7328 //Permutasi 13
7329 if(evaluate(evaluate(value[2],value[0],operation[i]),value[1],operation[j]),value[3],operation[k])-hasil == 0)
7330 {
    count++;
    if(output == 1)
    {
        cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << value[1] << ")"
        << operation[k] << endl;
    }
    else if(output == 2)
    {
        myfile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << value[1] << ")"
        << operation[k] << value[3] << endl;
    }
}
7331
7332
7333
7334
7335
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7348
7349
7350

```

```

File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - Tuclit_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
7351     << value[3] << endl;
7352 }
7353 else if(output == 2)
7354 {
    myFile << "(" << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")" << operation[k]
    << value[3] << endl;
7355 }
7356 }
7357 }
7358 }
7359 if(evaluate(evaluate(value[2],value[0],operation[i]),evaluate(value[1],value[3],operation[k]),operation[3])-hasil == 0)
7360 {
    count++;
    if(output == 1)
    {
        cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[1]
        << operation[k] << value[3] << ")" << endl;
    }
7361 }
7362 else if(output == 2)
7363 {
    myFile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[1]
    << operation[k] << value[3] << ")" << endl;
}
7364 }
7365 }
7366 }
7367 }
7368 }
7369 }
7370 if(evaluate(value[2],evaluate(evaluate(value[0],value[1],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
7371 {
    count++;
    if(output == 1)
    {
        cout << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")" << endl;
    }
7372 }
7373 }
7374 }
7375 if(evaluate(value[2],evaluate(evaluate(value[0],value[1],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
7376 {
    count++;
    if(output == 1)
    {
        cout << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")" << endl;
    }
7377 }
7378 }
7379 }
7380 cout << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")" << endl;
Ln 4368, Col 30 Spaces:4 UTF-8 CRLF C++ Win32
26°C Cloudy 12.17 25/01/2023

File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - Tuclit_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
7381     << operation[k] << value[3] << ")" << endl;
7382 }
7383 }
7384 else if(output == 2)
7385 {
    myFile << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
    << operation[k] << value[3] << ")" << endl;
}
7386 }
7387 }
7388 }
7389 }
7390 if(evaluate(value[2],evaluate(value[0],evaluate(value[1],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
7391 {
    count++;
    if(output == 1)
    {
        cout << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[1]
        << operation[k] << value[3] << ")" << endl;
    }
7392 }
7393 }
7394 else if(output == 2)
7395 {
    myFile << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[1]
    << operation[k] << value[3] << ")" << endl;
}
7396 }
7397 }
7398 }
7399 }
7400 else if(output == 2)
7401 {
    myFile << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[1]
    << operation[k] << value[3] << ")" << endl;
}
7402 }
7403 }
7404 }
7405 }
7406 }
7407 //Permutasi 15
7408 if(evaluate((evaluate(evaluate(value[2],value[1],operation[i]),value[0],operation[j]),value[3],operation[k])-hasil == 0)
7409 {
    count++;
7410
Ln 4368, Col 30 Spaces:4 UTF-8 CRLF C++ Win32
26°C Cloudy 12.17 25/01/2023

```

IF2211 Strategi Algoritma

```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
7411     if(output == 1)
7412     {
7413         cout << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << value[0] << ")"
7414         << operation[k] << value[3] << endl;
7415     }
7416
7417     else if(output == 2)
7418     {
7419         myFile << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << value[0] << ")"
7420         << operation[k] << value[3] << endl;
7421     }
7422
7423 }
7424 if(evaluate(evaluate(value[2]),evaluate(value[1],value[0],operation[j],operation[i]),value[3],operation[k])-hasil==0)
7425 {
7426     count++;
7427     if(output == 1)
7428     {
7429         cout << "(" << value[2] << operation[i] << "(" << value[1] << operation[j] << value[0] << ")"
7430         << operation[k] << value[3] << endl;
7431     }
7432
7433     else if(output == 2)
7434     {
7435         myFile << "(" << value[2] << operation[i] << "(" << value[1] << operation[j] << value[0] << ")"
7436         << operation[k] << value[3] << endl;
7437     }
7438
7439 }
7440 if(evaluate(evaluate(value[2]),value[1],operation[i]),evaluate(value[0],value[3],operation[k]),operation[i])-hasil == 0)
7441 {
7442     count++;
7443     if(output == 1)
7444     {
7445         cout << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << "(" << value[0]
7446         << operation[k] << value[3] << ")" << endl;
7447     }
7448
7449     else if(output == 2)
7450     {
7451         myFile << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << "(" << value[0]
7452         << operation[k] << value[3] << ")" << endl;
7453     }
7454
7455 }
7456 if(evaluate(value[2]),evaluate(evaluate(value[1],value[0],operation[j],value[3],operation[k]),operation[i])-24 == 0)
7457 {
7458     count++;
7459     if(output == 1)
7460     {
7461         cout << value[2] << operation[i] << "(" << value[1] << operation[j] << value[0] << ")"
7462         << operation[k] << value[3] << ")" << endl;
7463     }
7464
7465     else if(output == 2)
7466     {
7467         myFile << value[2] << operation[i] << "(" << value[1] << operation[j] << value[0] << ")"
7468         << operation[k] << value[3] << ")" << endl;
7469     }
7470 }
```

File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
7441 {
7442 count++;
7443 if(output == 1)
7444 {
7445 cout << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << "(" << value[0]
7446 << operation[k] << value[3] << ")" << endl;
7447 }
7448
7449 else if(output == 2)
7450 {
7451 myFile << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << "(" << value[0]
7452 << operation[k] << value[3] << ")" << endl;
7453 }
7454
7455 }
7456 if(evaluate(value[2]),evaluate(evaluate(value[1],value[0],operation[j],value[3],operation[k]),operation[i])-24 == 0)
7457 {
7458 count++;
7459 if(output == 1)
7460 {
7461 cout << value[2] << operation[i] << "(" << value[1] << operation[j] << value[0] << ")"
7462 << operation[k] << value[3] << ")" << endl;
7463 }
7464
7465 else if(output == 2)
7466 {
7467 myFile << value[2] << operation[i] << "(" << value[1] << operation[j] << value[0] << ")"
7468 << operation[k] << value[3] << ")" << endl;
7469 }
7470 }

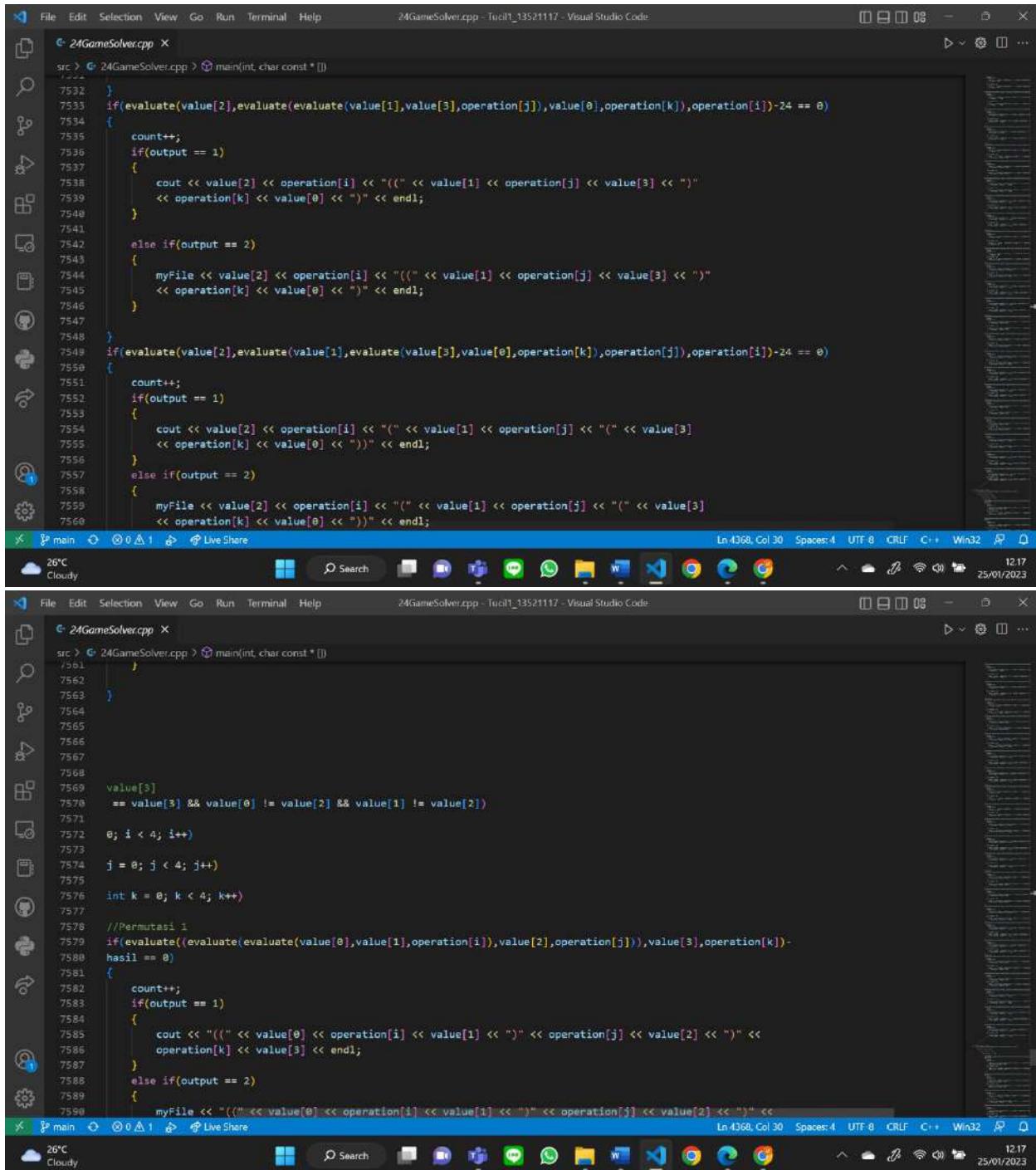
```

File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - Tucll_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const[])
7471 if(evaluate(value[2],evaluate(value[1],evaluate(value[0],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
7472 {
7473     count++;
7474     if(output == 1)
7475     {
7476         cout << value[2] << operation[i] << "(" << value[1] << operation[j] << "(" << value[0]
7477             << operation[k] << value[3] << ")" ) << endl;
7478     }
7479     else if(output == 2)
7480     {
7481         myFile << value[2] << operation[i] << "(" << value[1] << operation[j] << "(" << value[0]
7482             << operation[k] << value[3] << ")" ) << endl;
7483     }
7484 }
7485 //Permutasi 36
7486 if(evaluate(evaluate(value[2],value[1],operation[i]),value[3],operation[j]),value[0],operation[k])-hasil == 0)
7487 {
7488     count++;
7489     if(output == 1)
7490     {
7491         cout << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << value[3] << ")"
7492             << operation[k] << value[0] << endl;
7493     }
7494     else if(output == 2)
7495     {
7496         myFile << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << value[3] << ")"
7497             << operation[k] << value[0] << endl;
7498     }
7499 }

File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - Tucll_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const[])
7581 }
7582 if(evaluate(evaluate(value[2],evaluate(value[1],value[3],operation[j]),operation[i]),value[0],operation[k])-hasil==0)
7583 {
7584     count++;
7585     if(output == 1)
7586     {
7587         cout << "(" << value[2] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" )
7588             << operation[k] << value[0] << endl;
7589     }
7590     else if(output == 2)
7591     {
7592         myFile << "(" << value[2] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" )
7593             << operation[k] << value[0] << endl;
7594     }
7595 }
7596 }
7597 if(evaluate(evaluate(value[2],value[1],operation[i]),evaluate(value[3],value[0],operation[k]),operation[j])-hasil == 0)
7598 {
7599     count++;
7600     if(output == 1)
7601     {
7602         cout << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << "(" << value[3]
7603             << operation[k] << value[0] << ")" ) << endl;
7604     }
7605     else if(output == 2)
7606     {
7607         myFile << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << "(" << value[3]
7608             << operation[k] << value[0] << ")" ) << endl;
7609     }
7610 }
7611

```

IF2211 Strategi Algoritma



```
24GameSolver.cpp
src > 24GameSolver.cpp > main(int, char const *[])
7532 }
7533 if(evaluate(value[2],evaluate(evaluate(value[1],value[3],operation[j]),value[0],operation[k]),operation[i])-24 == 0)
7534 {
7535     count++;
7536     if(output == 1)
7537     {
7538         cout << value[2] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")"
7539         << operation[k] << value[0] << ")" << endl;
7540     }
7541 else if(output == 2)
7542 {
7543     myFile << value[2] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")"
7544         << operation[k] << value[0] << ")" << endl;
7545 }
7546 }
7547 if(evaluate(value[2],evaluate(value[1],evaluate(value[3],value[0],operation[k]),operation[j]),operation[i])-24 == 0)
7548 {
7549     count++;
7550     if(output == 1)
7551     {
7552         cout << value[2] << operation[i] << "(" << value[1] << operation[j] << "(" << value[3]
7553             << operation[k] << value[0] << ")" << endl;
7554     }
7555     else if(output == 2)
7556     {
7557         myFile << value[2] << operation[i] << "(" << value[1] << operation[j] << "(" << value[3]
7558             << operation[k] << value[0] << ")" << endl;
7559 }
7560 }
7561 }
7562 }
7563 }
7564 }
7565 }
7566 }
7567 }
7568 }
7569 value[3]
7570 == value[3] && value[0] != value[2] && value[1] != value[2])
7571 e; i < 4; i++)
7572 }
7573 }
7574 j = 0; j < 4; j++)
7575 }
7576 int k = 0; k < 4; k++)
7577 }
7578 //Permutasi 1
7579 if(evaluate((evaluate(evaluate(value[0],value[1],operation[i]),value[2],operation[j])),value[3],operation[k])-
7580 hasil == 0)
7581 {
7582     count++;
7583     if(output == 1)
7584     {
7585         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")" <<
7586         operation[k] << value[3] << endl;
7587     }
7588     else if(output == 2)
7589     {
7590         myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << value[2] << ")" <<
```

IF2211 Strategi Algoritma

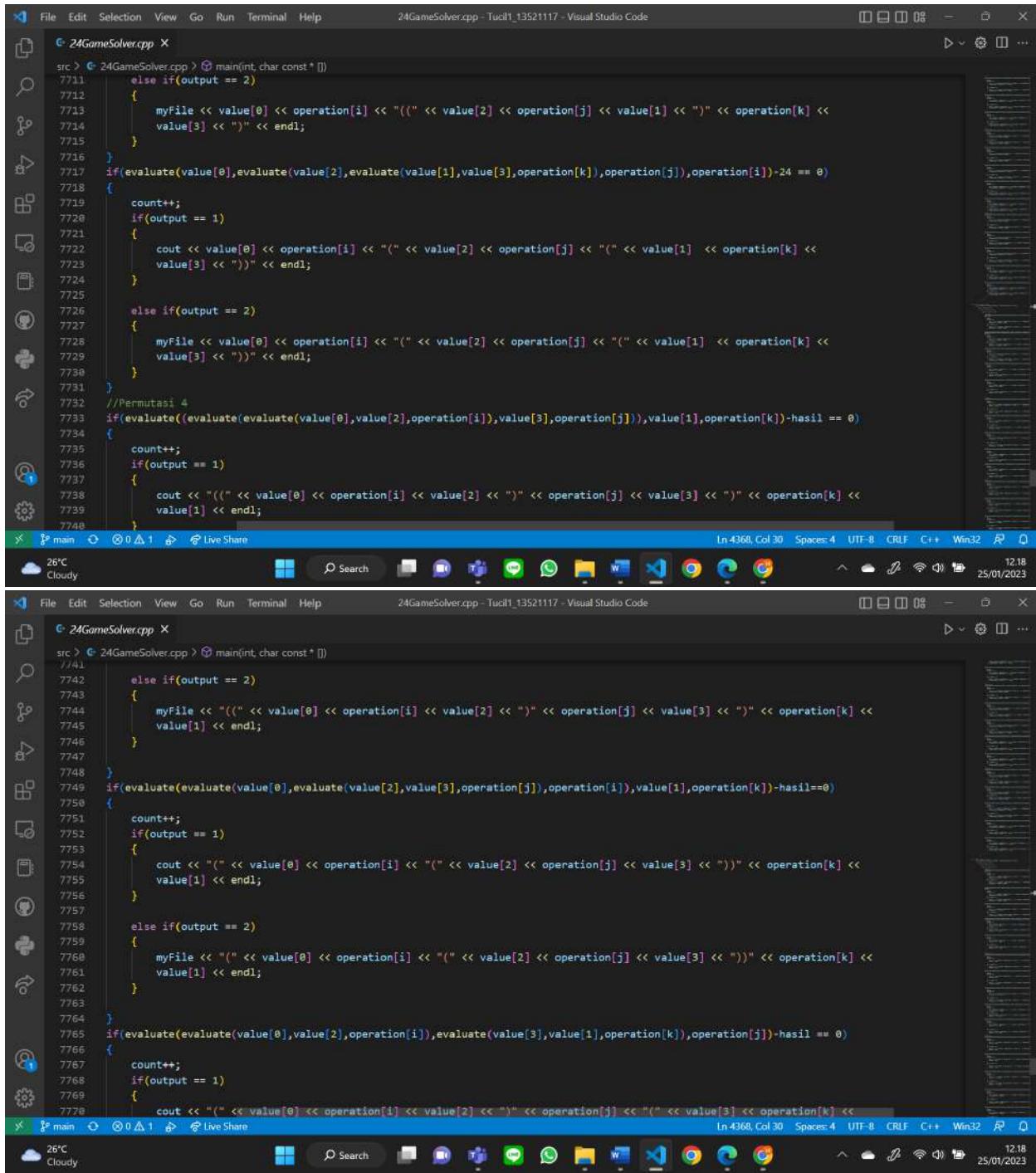
```
src > 24GameSolver.cpp > main(int, char const*[])
7591     operation[k] << value[3] << endl;
7592 }
7593
7594 }
7595 if(evaluate(evaluate(value[0],evaluate(value[1],value[2],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
7596 {
7597     count++;
7598     if(output == 1)
7599     {
7600         cout << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" <<
7601             operation[k] << value[3] << endl;
7602     }
7603     else if(output == 2)
7604     {
7605         myFile << "(" << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" <<
7606             operation[k] << value[3] << endl;
7607     }
7608 }
7609 if(evaluate(evaluate(value[0],value[1],operation[i]),evaluate(value[2],value[3],operation[k]),operation[j])-hasil == 0)
7610 {
7611     count++;
7612     if(output == 1)
7613     {
7614         cout << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2] << operation[k]
7615             << value[3] << ")" << endl;
7616     }
7617     else if (output == 2)
7618     {
7619         myFile << "(" << value[0] << operation[i] << value[1] << ")" << operation[j] << "(" << value[2]
```

```
src > 24GameSolver.cpp > main(int, char const*[])
7621     << operation[k] << value[3] << ")" << endl;
7622 }
7623
7624 if(evaluate(value[0],evaluate(evaluate(value[1],value[2],operation[j]),value[3],operation[k]),operation[i])-hasil == 0)
7625 {
7626     count++;
7627     if(output == 1)
7628     {
7629         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" << operation[k] <<
7630             value[3] << ")" << endl;
7631     }
7632     else if(output == 2)
7633     {
7634         myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << value[2] << ")" << operation[k] <<
7635             value[3] << ")" << endl;
7636     }
7637 }
7638 if(evaluate(value[0],evaluate(value[1],evaluate(value[2],value[3],operation[k]),operation[j]),operation[i])-hasil == 0)
7639 {
7640     count++;
7641     if(output == 1)
7642     {
7643         cout << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2] << operation[k] <<
7644             value[3] << ")" << endl;
7645     }
7646     else if(output == 2)
7647     {
7648         myFile << value[0] << operation[i] << "(" << value[1] << operation[j] << "(" << value[2] << operation[k] <<
```

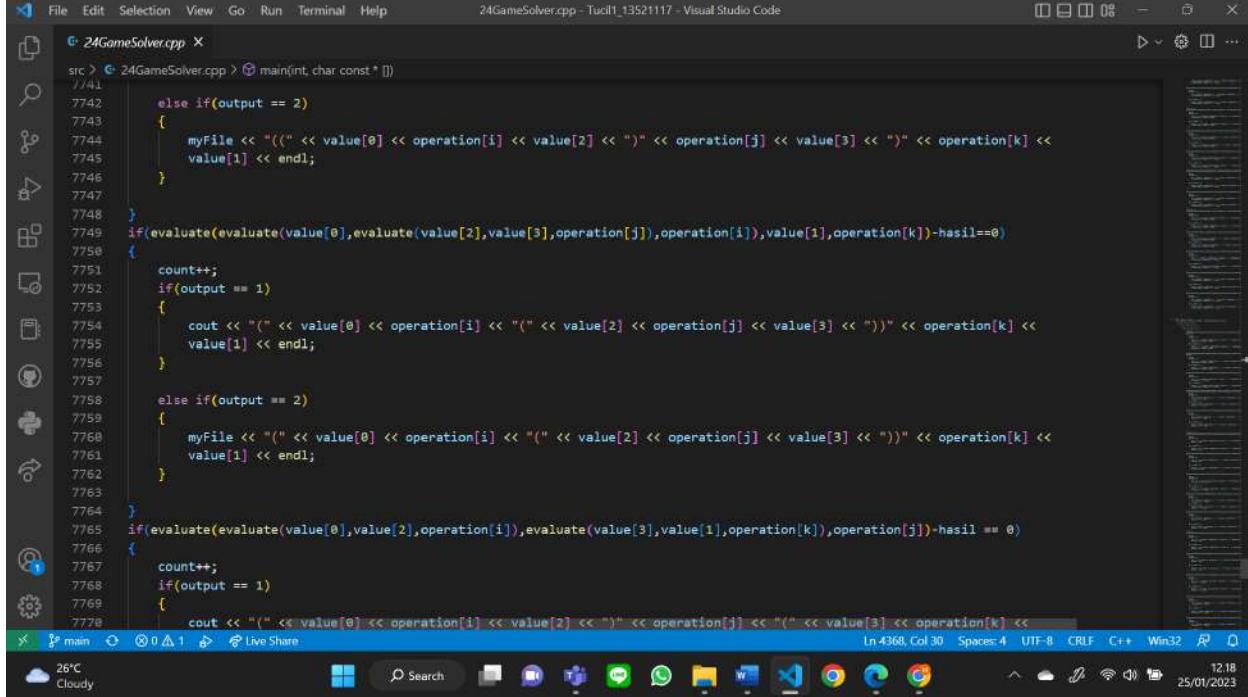
IF2211 Strategi Algoritma

```
24GameSolver.cpp // Permutasi 3
if(evaluate((evaluate(value[0],value[2],operation[i]),value[1],operation[j]),value[3],operation[k])-hasil == 0)
{
    count++;
    if(output == 1)
    {
        cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[1] << ")" << operation[k] <<
        value[3] << endl;
    }
    else if(output == 2)
    {
        myFile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[1] << ")" << operation[k] <<
        value[3] << endl;
    }
}
if(evaluate(evaluate(value[0],evaluate(value[2],value[1],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
{
    count++;
    if(output == 1)
    {
        cout << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k] <<
        value[3] << endl;
    }
}
else if(output == 2)
{
    myFile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[1] << operation[k]
    << value[3] << ")" << endl;
}
if(evaluate(value[0],evaluate(evaluate(value[2],value[1],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
{
    count++;
    if(output == 1)
    {
        cout << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k]
        << value[3] << ")" << endl;
    }
}
```

IF2211 Strategi Algoritma



```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - Tcull1_t3521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *)
7711     else if(output == 2)
7712     {
7713         myFile << value[0] << operation[i] << "(" << value[2] << operation[j] << value[1] << ")" << operation[k] <<
7714         value[3] << ")" << endl;
7715     }
7716 }
7717 if(evaluate(value[0],evaluate(value[2],evaluate(value[1],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
7718 {
7719     count++;
7720     if(output == 1)
7721     {
7722         cout << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[1] << operation[k] <<
7723         value[3] << ")" << endl;
7724     }
7725
7726     else if(output == 2)
7727     {
7728         myFile << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[1] << operation[k] <<
7729         value[3] << ")" << endl;
7730     }
7731 }
7732 //Permutasi 4
7733 if(evaluate((evaluate(evaluate(value[0],value[2],operation[i]),value[3],operation[j]),value[1],operation[k])-hasil == 0)
7734 {
7735     count++;
7736     if(output == 1)
7737     {
7738         cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[3] << ")" << operation[k] <<
7739         value[1] << endl;
7740     }
7741
7742     else if(output == 2)
7743     {
7744         myFile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[3] << ")" << operation[k] <<
7745         value[1] << endl;
7746     }
7747
7748 }
7749 if(evaluate(evaluate(value[0],evaluate(value[2],value[3],operation[j]),operation[i]),value[1],operation[k])-hasil==0)
7750 {
7751     count++;
7752     if(output == 1)
7753     {
7754         cout << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k] <<
7755         value[1] << endl;
7756     }
7757
7758     else if(output == 2)
7759     {
7760         myFile << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k] <<
7761         value[1] << endl;
7762     }
7763
7764 }
7765 if(evaluate(evaluate(value[0],value[2],operation[i]),evaluate(value[3],value[1],operation[k]),operation[j])-hasil == 0)
7766 {
7767     count++;
7768     if(output == 1)
7769     {
7770         cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[3] << operation[k] <<
```



```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - Tcull1_t3521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *)
7741
7742     else if(output == 2)
7743     {
7744         myFile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << value[3] << ")" << operation[k] <<
7745         value[1] << endl;
7746     }
7747
7748 }
7749 if(evaluate(evaluate(value[0],evaluate(value[2],value[3],operation[j]),operation[i]),value[1],operation[k])-hasil==0)
7750 {
7751     count++;
7752     if(output == 1)
7753     {
7754         cout << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k] <<
7755         value[1] << endl;
7756     }
7757
7758     else if(output == 2)
7759     {
7760         myFile << "(" << value[0] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k] <<
7761         value[1] << endl;
7762     }
7763
7764 }
7765 if(evaluate(evaluate(value[0],value[2],operation[i]),evaluate(value[3],value[1],operation[k]),operation[j])-hasil == 0)
7766 {
7767     count++;
7768     if(output == 1)
7769     {
7770         cout << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[3] << operation[k] <<
```

IF2211 Strategi Algoritma

```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
7772     }
7773
7774     else if(output == 2)
7775     {
7776         myFile << "(" << value[0] << operation[i] << value[2] << ")" << operation[j] << "(" << value[3] << operation[k] <<
7777         value[1] << ")" << endl;
7778     }
7779
7780 }
7781
7782 if(evaluate(value[0],evaluate(evaluate(value[2],value[3],operation[j]),value[1],operation[k]),operation[i])-24 == 0)
7783 {
7784     count++;
7785     if(output == 1)
7786     {
7787         cout << value[0] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k]
7788         << value[1] << ")" << endl;
7789     }
7790     else if(output == 2)
7791     {
7792         myFile << value[0] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << operation[k]
7793         << value[1] << ")" << endl;
7794     }
7795
7796 }
7797
7798 if(evaluate(value[0],evaluate(value[2],evaluate(value[3],value[1],operation[k]),operation[j]),operation[i])-24 == 0)
7799 {
8000     count++;
8001
8002     if(output == 1)
8003     {
8004         cout << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[3] << operation[k]
8005         << value[1] << ")" << endl;
8006     }
8007     else if(output == 2)
8008     {
8009         myFile << value[0] << operation[i] << "(" << value[2] << operation[j] << "(" << value[3] << operation[k]
8010         << value[1] << ")" << endl;
8011     }
8012
8013 }
8014 //Permutasi 7
8015 if(evaluate((evaluate(evaluate(value[1],value[0],operation[i]),value[2],operation[j])),value[3],operation[k])-hasil == 0)
8016 {
8017     count++;
8018     if(output == 1)
8019     {
8020         cout << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << value[2] << ")"
8021         << operation[k] << value[3] << endl;
8022     }
8023
8024     else if(output == 2)
8025     {
8026         myFile << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << value[2] << ")"
8027         << operation[k] << value[3] << endl;
8028     }
8029
8030 }
```

IF2211 Strategi Algoritma

```
24GameSolver.cpp - Tcullt_13521117 - Visual Studio Code
File Edit Selection View Go Run Terminal Help
src > 24GameSolver.cpp > main(int, char const *[])
7831 if(evaluate(evaluate(value[1],evaluate(value[0],value[2],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
7832
7833 {
7834     count++;
7835     if(output == 1)
7836     {
7837         cout << "(" << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")" << operation[k]
7838         << value[3] << endl;
7839     }
7840
7841     else if(output == 2)
7842     {
7843         myFile << "(" << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")"
7844         << operation[k] << value[3] << endl;
7845     }
7846 }
7847
7848 if(evaluate(evaluate(value[1],value[0],operation[i]),evaluate(value[2],value[3],operation[k]),operation[j])-hasil == 0)
7849 {
7850     count++;
7851     if(output == 1)
7852     {
7853         cout << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << "(" << value[2]
7854         << operation[k] << value[3] << ")" << endl;
7855     }
7856
7857     else if(output == 2)
7858     {
7859         myFile << "(" << value[1] << operation[i] << value[0] << ")" << operation[j] << "(" << value[2]
7860         << operation[k] << value[3] << ")" << endl;
7861     }
7862 }
7863
7864 if(evaluate(value[1],evaluate(evaluate(value[0],value[2],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
7865 {
7866     count++;
7867     if(output == 1)
7868     {
7869         cout << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")" << operation[k]
7870         << value[3] << ")" << endl;
7871     }
7872
7873
7874     else if(output == 2)
7875     {
7876         myFile << value[1] << operation[i] << "(" << value[0] << operation[j] << value[2] << ")" << operation[k]
7877         << value[3] << ")" << endl;
7878     }
7879 }
7880
7881 if(evaluate(value[1],evaluate(value[0],evaluate(value[2],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
7882 {
7883     count++;
7884     if(output == 1)
7885     {
7886         cout << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[2] << operation[k]
7887         << value[3] << ")" << endl;
7888     }
7889
7890     else if(output == 2)
7891
7892
7893
7894
7895
7896
7897
7898
7899
7900
```

IF2211 Strategi Algoritma

```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - Tucll_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
7891 {
7892     myFile << value[1] << operation[i] << "(" << value[0] << operation[j] << "(" << value[2] << operation[k]
7893     << value[3] << ")" << endl;
7894 }
7895
7896 }
7897 //Permutasi 9
7898 if(evaluate((evaluate(evaluate(value[1],value[2],operation[i]),value[0],operation[j])),value[3],operation[k])-hasil == 0)
7899 {
7900     count++;
7901     if(output == 1)
7902     {
7903         cout << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << value[0] << ")" << operation[k]
7904         << value[3] << endl;
7905     }
7906     else if(output == 2)
7907     {
7908         myFile << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << value[0] << ")" << operation[k]
7909         << value[3] << endl;
7910     }
7911 }
7912 if(evaluate(evaluate(value[1],evaluate(value[2],value[0],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
7913 {
7914     count++;
7915     if(output == 1)
7916     {
7917         cout << "(" << value[1] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")" << operation[k]
7918         << value[3] << endl;
7919     }
7920 }
7921 else if(output == 2)
7922 {
7923     myFile << "(" << value[1] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")" << operation[k]
7924     << value[3] << endl;
7925 }
7926
7927 }
7928
7929 if(evaluate(evaluate(value[1],value[2],operation[i]),evaluate(value[0],value[3],operation[k]),operation[j])-hasil == 0)
7930 {
7931     count++;
7932     if(output == 1)
7933     {
7934         cout << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << "(" << value[0] << operation[k]
7935         << value[3] << ")" << endl;
7936     }
7937     else if(output == 2)
7938     {
7939         myFile << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << "(" << value[0] << operation[k]
7940         << value[3] << ")" << endl;
7941     }
7942 }
7943
7944 if(evaluate(value[1],evaluate(evaluate(value[2],value[0],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
7945 {
7946     count++;
7947     if(output == 1)
7948     {
7949         cout << value[1] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")" << operation[k]
7950         << value[3] << ")" << endl;
7951 }
```

IF2211 Strategi Algoritma

```
24GameSolver.cpp
```

```
src > 24GameSolver.cpp > main(int, char const *[])
7951 }
7952
7953 else if(output == 2)
7954 {
    myFile << value[1] << operation[i] << "(" << value[2] << operation[j] << value[0] << ")" << operation[k]
    << value[3] << ")" << endl;
7955 }
7956
7957 }
7958
7959 }
7960 if(evaluate(value[1],evaluate(value[2],evaluate(value[0],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
7961 {
    count++;
    if(output == 1)
7962 {
        cout << value[1] << operation[i] << "(" << value[2] << operation[j] << "(" << value[0] << operation[k] <<
        value[3] << ")" << endl;
7963 }
7964
7965 else if(output == 2)
7966 {
        myFile << value[1] << operation[i] << "(" << value[2] << operation[j] << "(" << value[0] << operation[k]
        << value[3] << ")" << endl;
7967 }
7968
7969 //Permutasi 1B
7970 if(evaluate(evaluate(value[1],value[2],operation[i]),value[3],operation[j]),value[0],operation[k])-hasil == 0)
7971 {
    count++;
    if(output == 1)
7972 {
        cout << value[1] << operation[i] << value[2] << operation[j] << value[3] << operation[k] << endl;
7973 }
7974
7975 }
7976
7977 //Permutasi 1B
7978 if(evaluate(evaluate(value[1],value[2],operation[i]),value[3],operation[j]),value[0],operation[k])-hasil == 0)
7979 {
    count++;
    if(output == 1)
```

```
24GameSolver.cpp
```

```
src > 24GameSolver.cpp > main(int, char const *[])
7881 {
    cout << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << value[3] << ")" << operation[k]
    << value[0] << endl;
7882 }
7883
7884 else if(output == 2)
7885 {
    myFile << "(" << value[1] << operation[i] << value[2] << ")" << operation[j] << value[3] << ")" << operation[k]
    << value[0] << endl;
7886 }
7887
7888 if(evaluate(evaluate(value[1],evaluate(value[2],value[3],operation[j]),operation[i]),value[0],operation[k])-hasil==0)
7889 {
    count++;
    if(output == 1)
7890 {
        cout << "(" << value[1] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" << ")" << operation[k]
        << value[0] << endl;
7891 }
7892
7893 else if(output == 2)
7894 {
        myFile << "(" << value[1] << operation[i] << "(" << value[2] << operation[j] << value[3] << ")" <<
        operation[k] << value[0] << endl;
7895 }
7896
7897 }
7898
7899 if(evaluate(evaluate(value[1],value[2],operation[i]),evaluate(value[3],value[0],operation[k]),operation[j])-hasil == 0)
7900 {
    count++;
    if(output == 1)
```

IF2211 Strategi Algoritma

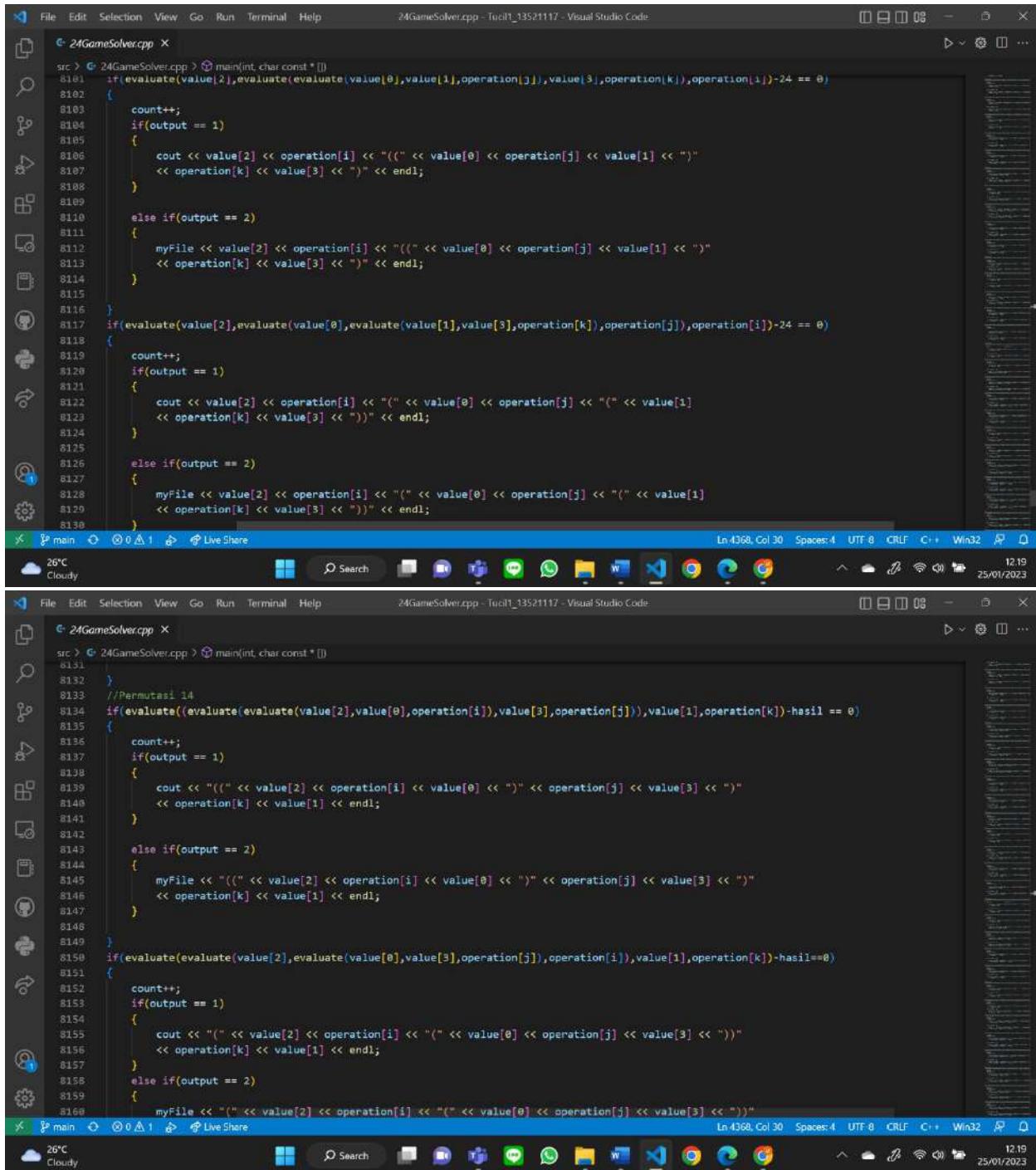
The screenshot shows a Visual Studio Code window with the following details:

- Title Bar:** File Edit Selection View Go Run Terminal Help
- File Path:** 24GameSolver.cpp - Tscitl_13521117 - Visual Studio Code
- Code Content:** The code is a C++ program for solving the 24 Game. It includes functions for evaluating expressions and checking if a target value (24) is reached. The code uses cout for output and myFile for writing to a file.
- Toolbars and Status Bar:** Includes standard VS Code icons like Save, Undo, Redo, and a search bar. The status bar at the bottom shows: Ln 4368 Col 30 Spaces:4 UTF-8 CRLF C++ Win32. It also displays system information: 26°C Cloudy, 12.18, and 25/01/2023.

IF2211 Strategi Algoritma

```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
8841     count++;
8842     if(output == 1)
8843     {
8844         cout << value[1] << operation[i] << "(" << value[2] << operation[j] << "(" << value[3] << operation[k]
8845         << value[0] << ")" << endl;
8846     }
8847     else if(output == 2)
8848     {
8849         myFile << value[1] << operation[i] << "(" << value[2] << operation[j] << "(" << value[3] << operation[k]
8850         << value[0] << ")" << endl;
8851     }
8852
8853 }
8854 //Permutasi 13
8855 if(evaluate(evaluate(value[2],value[0],operation[i]),value[1],operation[j]),value[3],operation[k])-hasil == 0)
8856 {
8857     count++;
8858     if(output == 1)
8859     {
8860         cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << value[1] << ")" << operation[k]
8861         << value[3] << endl;
8862     }
8863
8864     else if(output == 2)
8865     {
8866         myFile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << value[1] << ")" << operation[k]
8867         << value[3] << endl;
8868     }
8869
8870 }
8871
8872 if(evaluate(evaluate(value[2],evaluate(value[0],value[1],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
8873 {
8874     count++;
8875     if(output == 1)
8876     {
8877         cout << "(" << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")" << operation[k]
8878         << value[3] << endl;
8879     }
8880     else if(output == 2)
8881     {
8882         myFile << "(" << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")" << operation[k]
8883         << value[3] << endl;
8884     }
8885 if(evaluate(evaluate(value[2],value[0],operation[i]),evaluate(value[1],value[3],operation[k]),operation[j])-hasil == 0)
8886 {
8887     count++;
8888     if(output == 1)
8889     {
8890         cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[1]
8891         << operation[k] << value[3] << ")" << endl;
8892     }
8893
8894     else if(output == 2)
8895     {
8896         myFile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[1]
8897         << operation[k] << value[3] << ")" << endl;
8898     }
8899
8900 }
```

IF2211 Strategi Algoritma



```
24GameSolver.cpp

src > 24GameSolver.cpp > main(int, char const *[])
8161 if(evaluate(value[2],evaluate(evaluate(value[0],value[1],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
8162 {
8163     count++;
8164     if(output == 1)
8165     {
8166         cout << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
8167             << operation[k] << value[3] << ")" << endl;
8168     }
8169
8170     else if(output == 2)
8171     {
8172         myFile << value[2] << operation[i] << "(" << value[0] << operation[j] << value[1] << ")"
8173             << operation[k] << value[3] << ")" << endl;
8174     }
8175
8176 }
8177 if(evaluate(value[2],evaluate(value[0],evaluate(value[1],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
8178 {
8179     count++;
8180     if(output == 1)
8181     {
8182         cout << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[1]
8183             << operation[k] << value[3] << ")" ) << endl;
8184     }
8185
8186     else if(output == 2)
8187     {
8188         myFile << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[1]
8189             << operation[k] << value[3] << ")" ) << endl;
8190     }
8191
8192 }

24GameSolver.cpp

src > 24GameSolver.cpp > main(int, char const *[])
8131
8132 }
8133 //Permutasi 14
8134 if(evaluate((evaluate(evaluate(value[2],value[0],operation[i]),value[3],operation[j])),value[1],operation[k])-hasil == 0)
8135 {
8136     count++;
8137     if(output == 1)
8138     {
8139         cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << value[3] << ")"
8140             << operation[k] << value[1] << endl;
8141     }
8142
8143     else if(output == 2)
8144     {
8145         myFile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << value[3] << ")"
8146             << operation[k] << value[1] << endl;
8147     }
8148
8149 }
8150 if(evaluate(evaluate(value[2],evaluate(value[0],value[3],operation[j]),operation[i]),value[1],operation[k])-hasil==0)
8151 {
8152     count++;
8153     if(output == 1)
8154     {
8155         cout << "(" << value[2] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")"
8156             << operation[k] << value[1] << endl;
8157     }
8158     else if(output == 2)
8159     {
8160         myFile << "(" << value[2] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")")
```

IF2211 Strategi Algoritma

```
src > 24GameSolver.cpp > main(int, char const *[])
8161     << operation[k] << value[1] << endl;
8162 }
8163
8164 }
8165 if(evaluate(evaluate(value[2],value[0],operation[i]),evaluate(value[3],value[1],operation[k]),operation[j])-hasil == 0)
8166 {
8167     count++;
8168     if(output == 1)
8169     {
8170         cout << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[3]
8171         << operation[k] << value[1] << ")" << endl;
8172     }
8173
8174     else if(output == 2)
8175     {
8176         myFile << "(" << value[2] << operation[i] << value[0] << ")" << operation[j] << "(" << value[3]
8177         << operation[k] << value[1] << ")" << endl;
8178     }
8179
8180 }
8181 if(evaluate(value[2],evaluate(evaluate(value[0],value[3],operation[j]),value[1],operation[k]),operation[i])-24 == 0)
8182 {
8183     count++;
8184     if(output == 1)
8185     {
8186         cout << value[2] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")"
8187         << operation[k] << value[1] << ")" << endl;
8188     }
8189     else if(output == 2)
8190     {
8191         myFile << value[2] << operation[i] << "(" << value[0] << operation[j] << value[3] << ")"
8192         << operation[k] << value[1] << ")" << endl;
8193     }
8194
8195 }
8196 if(evaluate(value[2],evaluate(value[0],evaluate(value[3],value[1],operation[k]),operation[j]),operation[i])-24 == 0)
8197 {
8198     count++;
8199     if(output == 1)
8200     {
8201         cout << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[3]
8202         << operation[k] << value[1] << ")" << endl;
8203     }
8204
8205     else if(output == 2)
8206     {
8207         myFile << value[2] << operation[i] << "(" << value[0] << operation[j] << "(" << value[3]
8208         << operation[k] << value[1] << ")" << endl;
8209     }
8210
8211 }
8212 //Permutasi 15
8213 if(evaluate((evaluate(evaluate(value[2],value[1],operation[i]),value[0],operation[j])),value[3],operation[k])-hasil == 0)
8214 {
8215     count++;
8216     if(output == 1)
8217     {
8218         cout << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << value[0] << ")"
8219         << operation[k] << value[3] << endl;
8220     }
8221 }
```

```

File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
8221     else if(output == 2)
8222     {
8223         myFile << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << value[0] << ")"
8224         << operation[k] << value[3] << endl;
8225     }
8226 }
8227
8228 }
8229 if(evaluate(evaluate(value[2],evaluate(value[1],value[0],operation[j]),operation[i]),value[3],operation[k])-hasil==0)
8230 {
8231     count++;
8232     if(output == 1)
8233     {
8234         cout << "(" << value[2] << operation[i] << "(" << value[1] << operation[j] << value[0] << ")"
8235         << operation[k] << value[3] << endl;
8236     }
8237
8238     else if(output == 2)
8239     {
8240         myFile << "(" << value[2] << operation[i] << "(" << value[1] << operation[j] << value[0] << ")"
8241         << operation[k] << value[3] << endl;
8242     }
8243 }
8244
8245 if(evaluate(evaluate(value[2],value[1],operation[i]),evaluate(value[0],value[3],operation[k]),operation[j])-hasil == 0)
8246 {
8247     count++;
8248     if(output == 1)
8249     {
8250         cout << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << "(" << value[0]
8251             << operation[k] << value[3] << ")" << endl;
8252     }
8253
8254     else if(output == 2)
8255     {
8256         myFile << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << "(" << value[0]
8257             << operation[k] << value[3] << ")" << endl;
8258     }
8259 }
8260 if(evaluate(value[2],evaluate(evaluate(value[1],value[0],operation[j]),value[3],operation[k]),operation[i])-24 == 0)
8261 {
8262     count++;
8263     if(output == 1)
8264     {
8265         cout << value[2] << operation[i] << "(" << value[1] << operation[j] << value[0] << ")"
8266         << operation[k] << value[3] << ")" << endl;
8267     }
8268
8269     else if(output == 2)
8270     {
8271         myFile << value[2] << operation[i] << "(" << value[1] << operation[j] << value[0] << ")"
8272             << operation[k] << value[3] << ")" << endl;
8273     }
8274 }
8275
8276 if(evaluate(value[2],evaluate(value[1],evaluate(value[0],value[3],operation[k]),operation[j]),operation[i])-24 == 0)
8277 {
8278     count++;
8279     if(output == 1)
8280     {

```

IF2211 Strategi Algoritma

```
src > 24GameSolver.cpp > main(int, char const *[])
8281     cout << value[2] << value[i] << "(" << value[1] << operation[j] << "(" << value[0]
8282         << operation[k] << value[3] << ")" << endl;
8283     }
8284     else if(output == 2)
8285     {
8286         myFile << value[2] << operation[i] << "(" << value[1] << operation[j] << "(" << value[0]
8287             << operation[k] << value[3] << ")" << endl;
8288     }
8289 //Permutasi 16
8290 if(evaluate((evaluate(value[2],value[1],operation[i]),value[3],operation[j]),value[0],operation[k])-hasil == 0)
8291 {
8292     count++;
8293     if(output == 1)
8294     {
8295         cout << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << value[3] << ")"
8296             << operation[k] << value[0] << endl;
8297     }
8298     else if(output == 2)
8299     {
8300         myFile << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << value[3] << ")"
8301             << operation[k] << value[0] << endl;
8302     }
8303     if(evaluate(evaluate(value[2],evaluate(value[1],value[3],operation[j]),operation[i]),value[0],operation[k])-hasil==0)
8304     {
8305         count++;
8306     }
8307     if(output == 1)
8308     {
8309         count++;
8310     }
}
26°C Cloudy 12.19 25/01/2023
```

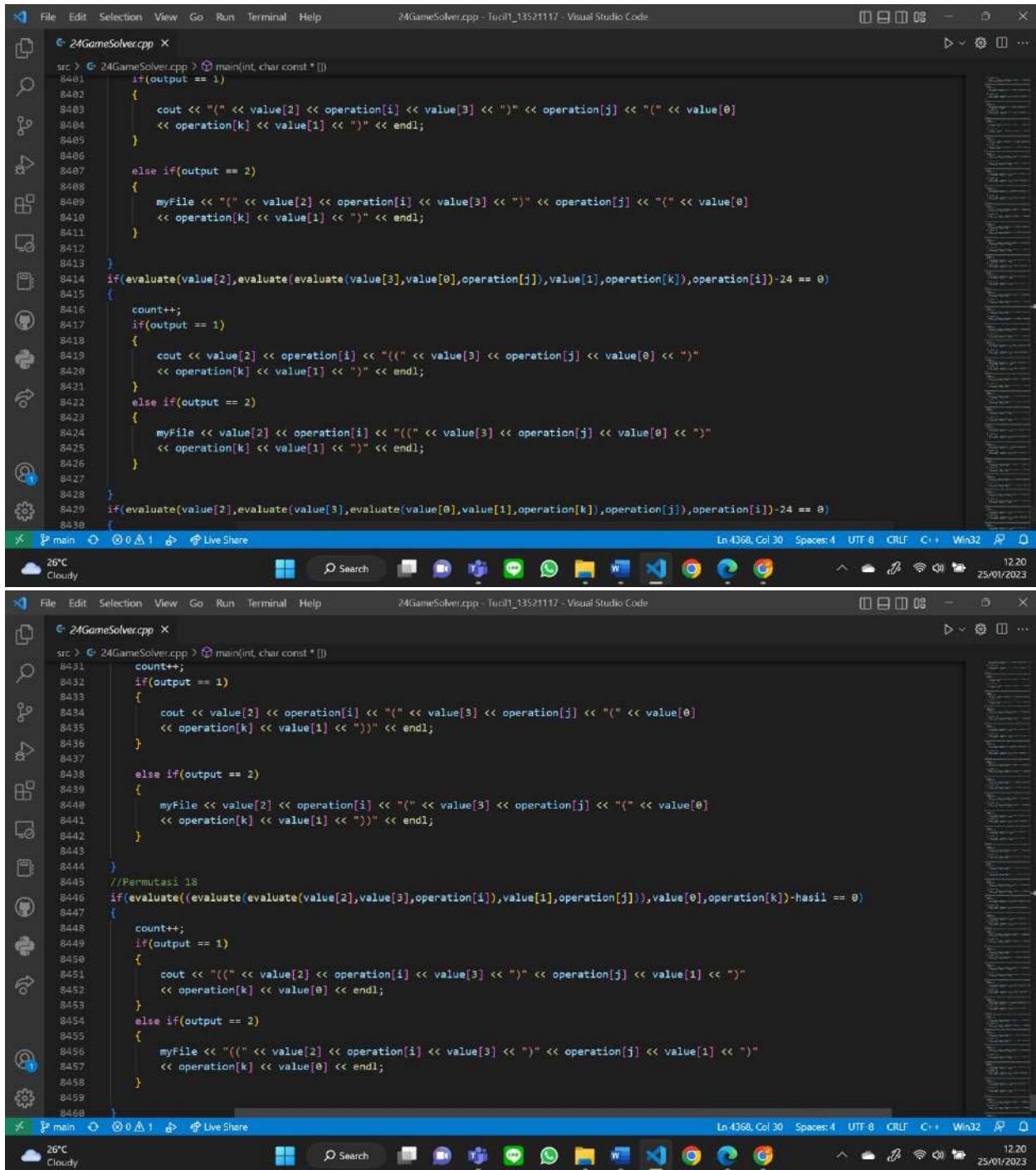


```
src > 24GameSolver.cpp > main(int, char const *[])
8311     cout << "(" << value[2] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" <<
8312         << operation[k] << value[0] << endl;
8313     }
8314     else if(output == 2)
8315     {
8316         myFile << "(" << value[2] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")" <<
8317             << operation[k] << value[0] << endl;
8318     }
8319     }
8320     }
8321     if(evaluate(evaluate(value[2],value[1],operation[i]),evaluate(value[3],value[0],operation[k]),operation[j])-hasil == 0)
8322     {
8323         count++;
8324         if(output == 1)
8325         {
8326             cout << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << "(" << value[3]
8327                 << operation[k] << value[0] << ")" << endl;
8328         }
8329         else if(output == 2)
8330         {
8331             myFile << "(" << value[2] << operation[i] << value[1] << ")" << operation[j] << "(" << value[3]
8332                 << operation[k] << value[0] << ")" << endl;
8333         }
8334     }
8335     }
8336     }
8337     if(evaluate(value[2],evaluate(evaluate(value[1],value[3],operation[j]),value[0],operation[k]),operation[i])-24 == 0)
8338     {
8339         count++;
8340     }
}
26°C Cloudy 12.19 25/01/2023
```

IF2211 Strategi Algoritma

```
src > 24GameSolver.cpp > main(int, char const *[])
8341     if(output == 1)
8342     {
8343         cout << value[2] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")"
8344             << operation[k] << value[0] << ")" << endl;
8345     }
8346
8347     else if(output == 2)
8348     {
8349         myFile << value[2] << operation[i] << "(" << value[1] << operation[j] << value[3] << ")"
8350             << operation[k] << value[0] << ")" << endl;
8351     }
8352
8353 }
8354 if(evaluate(value[2],evaluate(value[1],evaluate(value[3],value[0],operation[k]),operation[j]),operation[i])-24 == 0)
8355 {
8356     count++;
8357     if(output == 1)
8358     {
8359         cout << value[2] << operation[i] << "(" << value[1] << operation[j] << "(" << value[3]
8360             << operation[k] << value[0] << ")" << endl;
8361     }
8362     else if(output == 2)
8363     {
8364         myFile << value[2] << operation[i] << "(" << value[1] << operation[j] << "(" << value[3]
8365             << operation[k] << value[0] << ")" << endl;
8366     }
8367
8368 }
8369 //Permutasi 17
8370 if(evaluate(evaluate(evaluate(value[2],value[3],operation[1]),value[0],operation[j])),value[1],operation[k])-hasil == 0)
8371 {
8372     count++;
8373     if(output == 1)
8374     {
8375         cout << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << value[0] << ")"
8376             << operation[k] << value[1] << endl;
8377     }
8378     else if(output == 2)
8379     {
8380         myFile << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << value[0] << ")"
8381             << operation[k] << value[1] << endl;
8382     }
8383
8384 if(evaluate(evaluate(value[2],evaluate(value[3],value[0],operation[j]),operation[i]),value[1],operation[k])-hasil==0)
8385 {
8386     count++;
8387     if(output == 1)
8388     {
8389         cout << "(" << value[2] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")"
8390             << operation[k] << value[1] << endl;
8391     }
8392     else if(output == 2)
8393     {
8394         myFile << "(" << value[2] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")"
8395             << operation[k] << value[1] << endl;
8396     }
8397 }
8398 if(evaluate(evaluate(value[2],value[3],operation[i]),evaluate(value[0],value[1],operation[k]),operation[j])-hasil == 0)
8399 {
8400     count++;
8401 }
```

IF2211 Strategi Algoritma



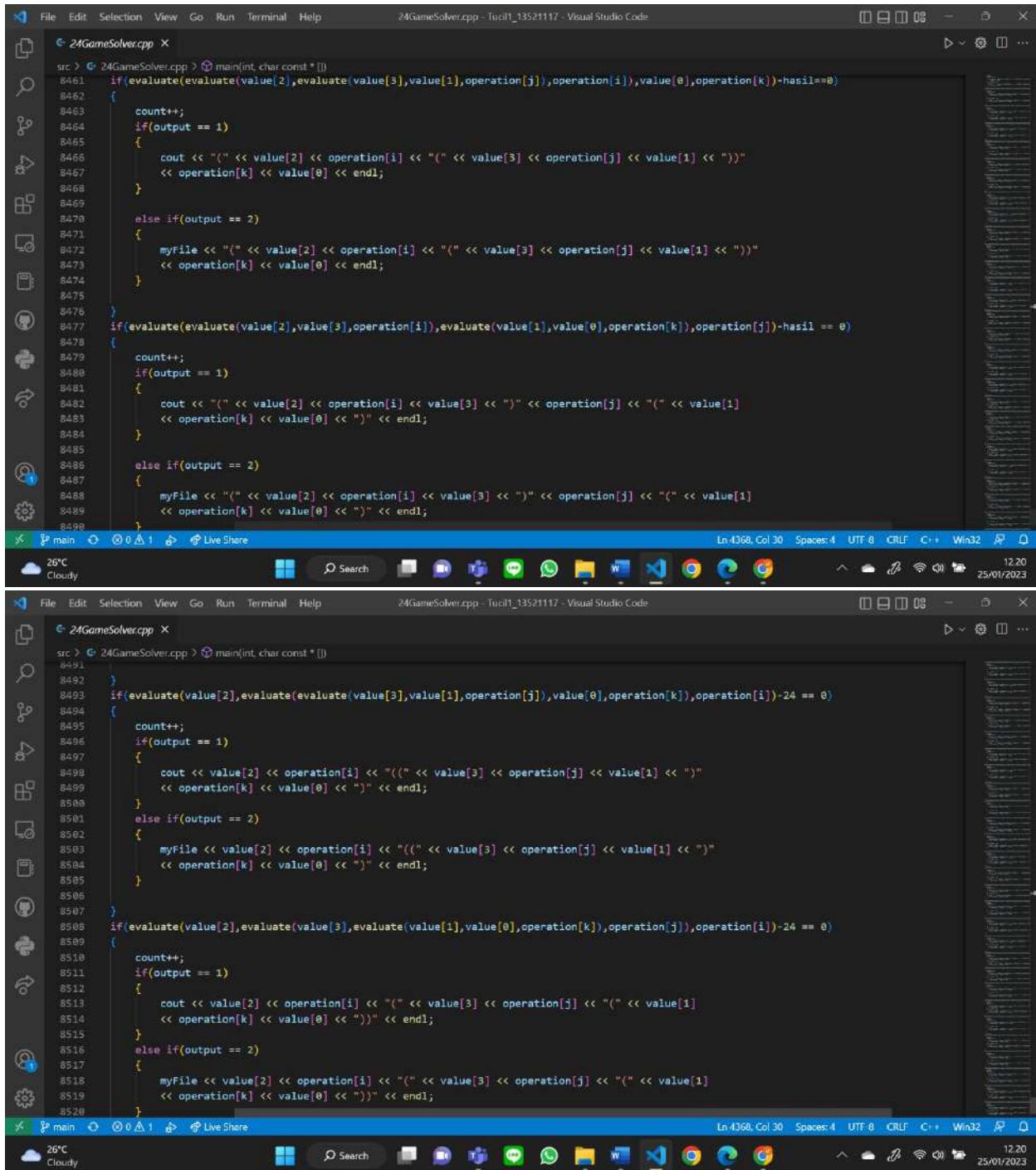
```
24GameSolver.cpp
```

```
src > 24GameSolver.cpp > main(int, char const *[])
8481     if(output == 1)
8482     {
8483         cout << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << "(" << value[0]
8484             << operation[k] << value[1] << ")" << endl;
8485     }
8486
8487     else if(output == 2)
8488     {
8489         myFile << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << "(" << value[0]
8490             << operation[k] << value[1] << ")" << endl;
8491     }
8492
8493 }
8494 if(evaluate(value[2],evaluate(evaluate(value[3],value[0],operation[j]),value[1],operation[k]),operation[i])-24 == 0)
8495 {
8496     count++;
8497     if(output == 1)
8498     {
8499         cout << value[2] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")"
8500             << operation[k] << value[1] << ")" << endl;
8501     }
8502     else if(output == 2)
8503     {
8504         myFile << value[2] << operation[i] << "(" << value[3] << operation[j] << value[0] << ")"
8505             << operation[k] << value[1] << ")" << endl;
8506     }
8507
8508 }
8509 if(evaluate(value[2],evaluate(value[3],evaluate(value[0],value[1],operation[k]),operation[j]),operation[i])-24 == 0)
8510 {
8511 }
```

```
24GameSolver.cpp
```

```
src > 24GameSolver.cpp > main(int, char const *[])
8431     count++;
8432     if(output == 1)
8433     {
8434         cout << value[2] << operation[i] << "(" << value[3] << operation[j] << "(" << value[0]
8435             << operation[k] << value[1] << ")" << endl;
8436     }
8437
8438     else if(output == 2)
8439     {
8440         myFile << value[2] << operation[i] << "(" << value[3] << operation[j] << "(" << value[0]
8441             << operation[k] << value[1] << ")" << endl;
8442     }
8443
8444 }
8445 //Permutasi 18
8446 if(evaluate((evaluate(evaluate(value[2],value[3],operation[i]),value[1],operation[j])),value[0],operation[k])-hasil == 0)
8447 {
8448     count++;
8449     if(output == 1)
8450     {
8451         cout << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << value[1] << ")"
8452             << operation[k] << value[0] << endl;
8453     }
8454     else if(output == 2)
8455     {
8456         myFile << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << value[1] << ")"
8457             << operation[k] << value[0] << endl;
8458     }
8459
8460 }
```

IF2211 Strategi Algoritma



```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
8461     if(evaluate(evaluate(value[2],evaluate(value[3],value[1],operation[j]),operation[i]),value[0],operation[k])-hasil==0)
8462     {
8463         count++;
8464         if(output == 1)
8465         {
8466             cout << "(" << value[2] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")"
8467             << operation[k] << value[0] << endl;
8468         }
8469         else if(output == 2)
8470         {
8471             myFile << "(" << value[2] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")"
8472             << operation[k] << value[0] << endl;
8473         }
8474     }
8475
8476     if(evaluate(evaluate(value[2],value[3],operation[i]),evaluate(value[1],value[0],operation[k]),operation[j])-hasil == 0)
8477     {
8478         count++;
8479         if(output == 1)
8480         {
8481             cout << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << "(" << value[1]
8482             << operation[k] << value[0] << ")" << endl;
8483         }
8484         else if(output == 2)
8485         {
8486             myFile << "(" << value[2] << operation[i] << value[3] << ")" << operation[j] << "(" << value[1]
8487             << operation[k] << value[0] << ")" << endl;
8488         }
8489     }
8490 }
```

```
File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - TcUtil_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
8491
8492     if(evaluate(value[2],evaluate(evaluate(value[3],value[1],operation[j]),value[0],operation[k]),operation[i])-24 == 0)
8493     {
8494         count++;
8495         if(output == 1)
8496         {
8497             cout << value[2] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")"
8498             << operation[k] << value[0] << ")" << endl;
8499         }
8500         else if(output == 2)
8501         {
8502             myFile << value[2] << operation[i] << "(" << value[3] << operation[j] << value[1] << ")"
8503             << operation[k] << value[0] << ")" << endl;
8504         }
8505     }
8506
8507     if(evaluate(value[2],evaluate(value[3],evaluate(value[1],value[0],operation[k]),operation[j]),operation[i])-24 == 0)
8508     {
8509         count++;
8510         if(output == 1)
8511         {
8512             cout << value[2] << operation[i] << "(" << value[3] << operation[j] << "(" << value[1]
8513             << operation[k] << value[0] << ")" << endl;
8514         }
8515         else if(output == 2)
8516         {
8517             myFile << value[2] << operation[i] << "(" << value[3] << operation[j] << "(" << value[1]
8518             << operation[k] << value[0] << ")" << endl;
8519         }
8520     }
8521 }
```

```

File Edit Selection View Go Run Terminal Help 24GameSolver.cpp - Tuclit_13521117 - Visual Studio Code
src > 24GameSolver.cpp > main(int, char const *[])
8521
8522
8523
8524
8525
8526
8527
8528 }
8529 //12.Menangani output-output jumlah solusi dan waktu
8530 if (count == 0)
8531 {
8532     if(output == 1)
8533     {
8534         cout << "Maaf tidak ditemukan solusi" << endl;
8535         myFile << "Waktu eksekusi program : " << endl;
8536         cout << (double)(clock() - startTime)/CLOCKS_PER_SEC << " second" << endl;
8537     }
8538     else if(output == 2)
8539     {
8540         myFile << "Maaf tidak ditemukan solusi" << endl;
8541         myFile << "Waktu eksekusi program : " << endl;
8542         myFile << (double)(clock() - startTime)/CLOCKS_PER_SEC << " second" << endl;
8543     }
8544 }
8545 else
8546 {
8547     if(output == 1)
8548     {
8549         cout << "Banyaknya solusi sebanyak : " << count << endl;
8550         cout << "Waktu eksekusi program : " << endl;
8551     }
8552 }
8553
8554 cout << (double)(clock() - startTime)/CLOCKS_PER_SEC << " second" << endl;
8555
8556
8557
8558
8559
8560
8561
8562
8563
8564
8565
8566
8567
8568
8569 cout << "Terima kasih telah menggunakan 24GameSolver" << endl;
8570 return 0;
8571 }
8572 }

```

function.cpp

```

src > C:\function.cpp > ...
1 #include <iostream>
2 using namespace std;
3 void selectionSort(double arr[],int n) //n disini bersumber dari jumlah anggota array, jika di case ini n yang akan digunakan adalah 4
4 {for(int i = 0;i < n;i++){
5     int min = i;
6     for(int j = i+1;j < n;j++){
7         if (arr[j] < arr[min])
8             min = j;
9         swap(arr[i],arr[min]);}
10 double evaluate(double value1, double value2, char operasi){
11     if(operasi == '+'){
12         return value1+value2;}
13     else if(operasi == '-'){
14         return value1-value2;}
15     else if(operasi == '*'){
16         return value1*value2;}
17     else if(operasi == '/'){
18         return value1/value2;}
19 void inputUser(double value[])
20 {
21     for(int i = 0; i < 4; i++){
22         string sementara;
23         cout << "Masukkan input anda : " << endl;
24         cin >> sementara;
25         if(sementara == "A"){
26             value[i] = 1;
27         else if(sementara == "B")
28             [value[i] = 11];
29         else if(sementara == "Q"){
30             break;
31         }
32         else if(sementara == "K"){
33             value[i] = 13;
34         else if(sementara == "2"){
35             value[i] = 2;
36         else if(sementara == "3"){
37             value[i] = 3;
38         else if(sementara == "4"){
39             value[i] = 4;
40         else if(sementara == "5"){
41             value[i] = 5;
42         else if(sementara == "6"){
43             value[i] = 6;
44         else if(sementara == "7"){
45             value[i] = 7;
46         else if(sementara == "8"){
47             value[i] = 8;
48         else if(sementara == "9"){
49             value[i] = 9;
50         else if(sementara == "10"){
51             value[i] = 10;
52         else{
53             while(sementara != "A" && sementara != "2" && sementara != "3" && sementara != "4" && sementara != "5" && sementara != "6" &&
54             sementara != "7" && sementara != "8" && sementara != "9" && sementara != "10" && sementara != "J" && sementara != "Q" && sementara != "K"
55             cout << "Input anda salah, Mohon input ulang Jawaban anda" << endl;
56             cin >> sementara;}
57             if(sementara == "A"){
58                 value[i] = 1;
59             else if(sementara == "J"){
60                 value[i] = 11;
61             }
62         }
63     }
64 }
65 
```

```

66     cout << "Input anda salah, Mohon input ulang Jawaban anda" << endl;
67     cin >> sementara;}
68     if(sementara == "A"){
69         value[i] = 1;
70     else if(sementara == "J"){
71         value[i] = 11;
72     }
73 }
```

```
function.cpp 1
src > function.cpp > ...
61     else if(sementara == "Q"){
62         value[i] = 12;
63     else if(sementara == "K"){
64         value[i] = 13;
65     else if(sementara == "Z"){
66         value[i] = 2;
67     else if(sementara == "S"){
68         value[i] = 3;
69     else if(sementara == "A"){
70         value[i] = 4;
71     else if(sementara == "P"){
72         value[i] = 5;
73     else if(sementara == "L"){
74         value[i] = 6;
75     else if(sementara == "T"){
76         value[i] = 7;
77     else if(sementara == "B"){
78         value[i] = 8;
79     else if(sementara == "C"){
80         value[i] = 9;
81     else if(sementara == "D"){
82         value[i] = 10;}}}
```

Live Share

Ln 83, Col 1 Spaces:4 UTF-8 CRLF C++ Win32 11:35
25/01/2023

Cloudy 25°C

Screenshot

Testcase 1

```
****Tekan 1 untuk bermain, atau 2 keluar dari 24Game Solver ini ****
1.Solve
2.Keluar
1
Pilih jenis Input:
1. Random
2. Input user
1
output
1.Terminal
2.Text
1
((5+9)+12)-2
(5+(9+12))-2
(5+9)+(12-2)
5+((9+12)-2)
5+(9+(12-2))
((5+12)+9)-2
(5+(12+9))-2
(5+12)+(9-2)
5+((12+9)-2)
5+(12+(9-2))
((5+9)-2)+12
(5+(9-2))+12
5-((2-12)-9)
9-((2-5)-12)
((9-2)-5)*12
Banyaknya solusi sebanyak : 43
Waktu eksekusi program :
0.034 second
Terima kasih telah menggunakan 24GameSolver
```

Testcase 2

```
****Tekan 1 untuk bermain, atau 2 keluar dari 24Game Solver ini ****
1.Solve
2.Keluar
1
Pilih jenis Input:
1. Random
2. Input user
1
output
1.Terminal
2.Text
1
(8+10)+(12/2)
8+(10+(12/2))
((8+10)*2)-12
(8+(12/2))+10
8+((12/2)+10)
(2*(8+10))-12
(2*(10+8))-12
((2*10)+12)-8
(2*10)+(12-8)
((2*10)-8)+12
((10*2)-8)+12
(2*10)-(8-12)
(10*2)-(8-12)
Banyaknya solusi sebanyak : 13
Waktu eksekusi program :
0.007 second
Terima kasih telah menggunakan 24GameSolver
```

Testcase 3

```
****Tekan 1 untuk bermain, atau 2 keluar dari 24Game Solver ini ****
1.Solve
2.Keluar
1
Pilih jenis Input:
1. Random
2. Input user
2
Masukkan input anda :
As
Masukkan input anda :
2
Masukkan input anda :
3
Masukkan input anda :
4
output
1.Terminal
2.Text
1
((1+2)+3)*4
(1+(2+3))*4
((1+3)+2)*4
(1+(3+2))*4
((2+1)+3)*4
(2+(1+3))*4
((2+3)+1)*4
(2+(3+1))*4
((3+1)+2)*4
(3+(1+2))*4
(1+3)*(2+4)
(1+3)*(4+2)
(2+4)*(3+1)
(2+4)*(1+3)
(3+1)*(2+4)
((1*2)*3)*4
```

```
(1*(2*4))*3
(1*2)*(4*3)
1*((2*4)*3)
1*(2*(4*3))
((1*3)*2)*4
(1*(3*2))*4
(1*3)*(2*4)
1*((3*2)*4)
1*(3*(2*4))
((1*3)*4)*2
(1*(3*4))*2
(1*3)*(4*2)
1*((3*4)*2)
1*(3*(4*2))
((1*4)*2)*3
(1*(4*2))*3
(1*4)*(2*3)
1*((4*2)*3)
1*(4*(2*3))
((1*4)*3)*2
(1*(4*3))*2
(1*4)*(3*2)
1*((4*3)*2)
1*(4*(3*2))
((2*1)*3)*4
(2*(1*3))*4
(2*1)*(3*4)
2*((1*3)*4)
2*(1*(3*4))
((2*1)*4)*3
(2*(1*4))*3
(2*1)*(4*3)
2*((1*4)*3)
2*(1*(4*3))
((2*3)*1)*4
(2*(3*1))*4
```

```
2*(3*(1*4))
((2*3)*4)*1
(2*(3*4))*1
(2*3)*(4*1)
2*((3*4)*1)
2*(3*(4*1))
((2*4)*3)*1
(2*(4*3))*1
(2*4)*(3*1)
2*((4*3)*1)
2*(4*(3*1))
((2*4)*1)*3
(2*(4*1))*3
(2*4)*(1*3)
2*((4*1)*3)
2*(4*(1*3))
((3*1)*2)*4
(3*(1*2))*4
(3*1)*(2*4)
3*((1*2)*4)
3*(1*(2*4))
((3*1)*4)*2
(3*(1*4))*2
(3*1)*(4*2)
3*((1*4)*2)
3*(1*(4*2))
((3*2)*1)*4
(3*(2*1))*4
(3*2)*(1*4)
3*((2*1)*4)
3*(2*(1*4))
((3*2)*4)*1
(3*(2*4))*1
(3*2)*(4*1)
3*((2*4)*1)
3*(2*(4*1))
```

```
((3*4)*1)*2  
(3*(4*1))*2  
(3*4)*(1*2)  
3*((4*1)*2)  
3*(4*(1*2))  
((3*4)*2)*1  
(3*(4*2))*1  
(3*4)*(2*1)  
3*((4*2)*1)  
3*(4*(2*1))  
((4*1)*2)*3  
(4*(1*2))*3  
(4*1)*(2*3)  
4*((1*2)*3)  
4*(1*(2*3))  
((4*1)*3)*2  
(4*(1*3))*2  
(4*1)*(3*2)  
4*((1*3)*2)  
4*(1*(3*2))  
((4*2)*3)*1  
(4*(2*3))*1  
(4*2)*(3*1)  
4*((2*3)*1)  
4*(2*(3*1))  
((4*2)*1)*3  
(4*(2*1))*3  
(4*2)*(1*3)  
4*((2*1)*3)  
4*(2*(1*3))  
((4*3)*2)*1  
(4*(3*2))*1  
(4*3)*(2*1)  
4*((3*2)*1)  
4*(3*(2*1))  
((4*3)*1)*2
```

```
(4*(3*1))*2
(4*3)*(1*2)
4*((3*1)*2)
4*(3*(1*2))
((2*3)*4)/1
(2*(3*4))/1
(2*3)*(4/1)
2*((3*4)/1)
2*(3*(4/1))
((2*4)*3)/1
(2*(4*3))/1
(2*4)*(3/1)
2*((4*3)/1)
2*(4*(3/1))
((2*3)/1)*4
(2*(3/1))*4
2*((3/1)*4)
((2*4)/1)*3
(2*(4/1))*3
2*((4/1)*3)
(2*3)/(1/4)
2*(3/(1/4))
(2*4)/(1/3)
2*(4/(1/3))
((2/1)*3)*4
(2/1)*(3*4)
((2/1)*4)*3
(2/1)*(4*3)
((3/1)*2)*4
(3/1)*(2*4)
(2/(1/3))*4
2/(1/(3*4))
(2/(1/4))*3
2/(1/(4*3))
(3/(1/2))*4
3/(1/(2*4))
```

```
(3/(1/4))*2
3/(1/(4*2))
(4/(1/2))*3
4/(1/(2*3))
(4/(1/3))*2
4/(1/(3*2))
2/((1/3)/4)
2/((1/4)/3)
3/((1/2)/4)
Banyaknya solusi sebanyak : 176
Waktu eksekusi program :
0.069 second
Terima kasih telah menggunakan 24GameSolver
```

Testcase 4

```
2.Keluar
1
Pilih jenis Input:
1. Random
2. Input user
2
Masukkan input anda :
7
Masukkan input anda :
5
Masukkan input anda :
8
Masukkan input anda :
3
output
1.Terminal
2.Text
1
3+((8-5)*7)
3+(7*(8-5))
3-((5-8)*7)
3-(7*(5-8))
((3*7)+8)-5
(3*7)+(8-5)
((3*7)-5)+8
(5*7)-(3+8)
(5*7)-(8+3)
((7*3)-5)+8
(3*7)-(5-8)
((5*7)-3)-8
((5*7)-8)-3
(7*3)-(5-8)
Banyaknya solusi sebanyak : 14
Waktu eksekusi program :
0.012 second
Terima kasih telah menggunakan 24GameSolver
```

Testcase 5

```
****Tekan 1 untuk bermain, atau 2 keluar dari 24Game Solver ini ****
1.Solve
2.Keluar
1
Pilih jenis Input:
1. Random
2. Input user
2
Masukkan input anda :
As
Masukkan input anda :
8
Masukkan input anda :
9
Masukkan input anda :
Q
output
1.Terminal
2.Text
1
((1+9)-8)*12
(1+(9-8))*12
((9+1)-8)*12
(9+(1-8))*12
((1-8)+9)*12
(1-(8-9))*12
((1*12)-9)*8
(1*(12-9))*8
1*((12-9)*8)
(8*(12-9))*1
8*((12-9)*1)
8*(12-(9*1))
8*(12-(1*9))
(8*(12-9))/1
8*((12-9)/1)
8*(12-(9/1))
```

```
(1*8)*(12-9)
1*(8*(12-9))
(8*1)*(12-9)
8*((1*12)-9)
8*(1*(12-9))
8*((12*1)-9)
8*((12/1)-9)
(8/1)*(12-9)
8/(1/(12-9))
Banyaknya solusi sebanyak : 25
Waktu eksekusi program :
0.017 second
Terima kasih telah menggunakan 24GameSolver
```

Testcase 6

```
****Tekan 1 untuk bermain, atau 2 keluar dari 24Game Solver ini ****
1.Solve
2.Keluar
1
Pilih jenis Input:
1. Random
2. Input user
2
Masukkan input anda :
As
Masukkan input anda :
4
Masukkan input anda :
8
Masukkan input anda :
J
output
1.Terminal
2.Text
1
((1+4)+8)+11
(1+(4+8))+11
(1+4)+(8+11)
1+((4+8)+11)
1+(4+(8+11))
((1+4)+11)+8
(1+(4+11))+8
(1+4)+(11+8)
1+((4+11)+8)
1+(4+(11+8))
((1+8)+4)+11
(1+(8+4))+11
(1+8)+(4+11)
1+((8+4)+11)
1+(8+(4+11))
((1+8)+11)+4
```

```
(1+(8+11))+4  
(1+8)+(11+4)  
1+((8+11)+4)  
1+(8+(11+4))  
((1+11)+4)+8  
(1+(11+4))+8  
(1+11)+(4+8)  
1+((11+4)+8)  
1+(11+(4+8))  
((1+11)+8)+4  
(1+(11+8))+4  
(1+11)+(8+4)  
1+((11+8)+4)  
1+(11+(8+4))  
((4+1)+8)+11  
(4+(1+8))+11  
(4+1)+(8+11)  
4+((1+8)+11)  
4+(1+(8+11))  
((4+1)+11)+8  
(4+(1+11))+8  
(4+1)+(11+8)  
4+((1+11)+8)  
4+(1+(11+8))  
((4+8)+1)+11  
(4+(8+1))+11  
(4+8)+(1+11)  
4+((8+1)+11)  
4+(8+(1+11))  
((4+8)+11)+1  
(4+(8+11))+1  
(4+8)+(11+1)  
4+((8+11)+1)  
4+(8+(11+1))  
((4+11)+8)+1  
(4+(11+8))+1
```

```
(4+11)+(8+1)
4+((11+8)+1)
4+(11+(8+1))
((4+11)+1)+8
(4+(11+1))+8
(4+11)+(1+8)
4+((11+1)+8)
4+(11+(1+8))
((8+1)+4)+11
(8+(1+4))+11
(8+1)+(4+11)
8+((1+4)+11)
8+(1+(4+11))
((8+1)+11)+4
(8+(1+11))+4
(8+1)+(11+4)
8+((1+11)+4)
8+(1+(11+4))
((8+4)+1)+11
(8+(4+1))+11
(8+4)+(1+11)
8+((4+1)+11)
8+(4+(1+11))
((8+4)+11)+1
(8+(4+11))+1
(8+4)+(11+1)
8+((4+11)+1)
8+(4+(11+1))
((8+11)+1)+4
(8+(11+1))+4
(8+11)+(1+4)
8+((11+1)+4)
8+(11+(1+4))
((8+11)+4)+1
(8+(11+4))+1
(8+11)+(4+1)
```

```
8+((11+4)+1)
8+(11+(4+1))
((11+1)+4)+8
(11+(1+4))+8
(11+1)+(4+8)
11+((1+4)+8)
11+(1+(4+8))
((11+1)+8)+4
(11+(1+8))+4
(11+1)+(8+4)
11+((1+8)+4)
11+(1+(8+4))
((11+4)+8)+1
(11+(4+8))+1
(11+4)+(8+1)
11+((4+8)+1)
11+(4+(8+1))
((11+4)+1)+8
(11+(4+1))+8
(11+4)+(1+8)
11+((4+1)+8)
11+(4+(1+8))
((11+8)+4)+1
(11+(8+4))+1
(11+8)+(4+1)
11+((8+4)+1)
11+(8+(4+1))
((11+8)+1)+4
(11+(8+1))+4
(11+8)+(1+4)
11+((8+1)+4)
11+(8+(1+4))
((1+11)*8)/4
(1+11)*(8/4)
((1+11)/4)*8
(1+11)/(4/8)
```

```
Banyaknya solusi sebanyak : 124
Waktu eksekusi program :
0.06 second
Terima kasih telah menggunakan 24GameSolver
```

Alamat Drive

https://github.com/maggiezetaa/Tucil1_13521117

Lampiran

Tabel Check List

| Poin | Ya | Tidak |
|---|----|-------|
| 1. Program berhasil dikompilasi tanpa kesalahan | ✓ | |
| 2. Program berhasil <i>running</i> | ✓ | |
| 3. Program dapat membaca input / generate sendiri dan memberikan luaran | ✓ | |
| 4. Solusi yang diberikan program memenuhi (berhasil mencapai 24) | ✓ | |
| 5. Program dapat menyimpan solusi dalam file teks | ✓ | |