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Kelas : SE-44-01

Jurnal Modul 7

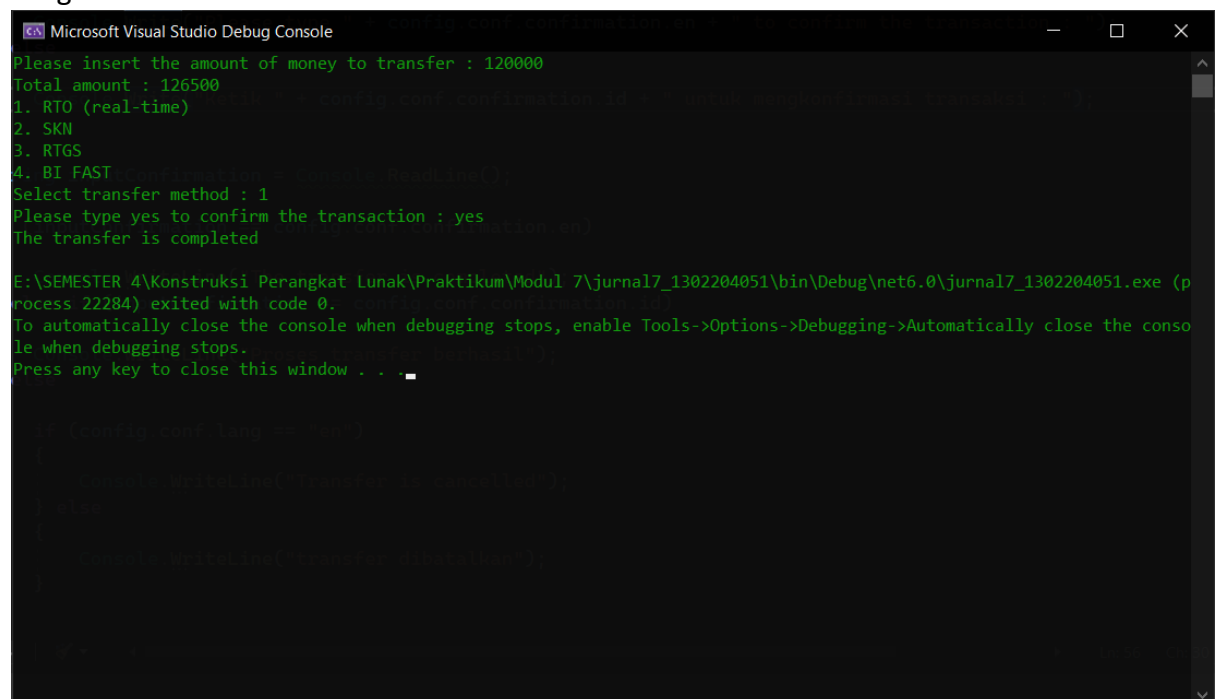
1. Link Repository

<https://github.com/RevDonz/jurnal-modul-7-kpl>

2. Screenshot

Hasil program ketika dijalankan :

Lang “en” :



```
Microsoft Visual Studio Debug Console
Please insert the amount of money to transfer : 120000
Total amount : 126500
1. RTO (real-time)
2. SKN
3. RTGS
4. BI FAST
Select transfer method : 1
Please type yes to confirm the transaction : yes
The transfer is completed

E:\SEMESTER 4\Konstruksi Perangkat Lunak\Praktikum\Modul 7\jurnal7_1302204051\bin\Debug\net6.0\jurnal7_1302204051.exe (process 22284) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```

```
Microsoft Visual Studio Debug Console
Please insert the amount of money to transfer : 26000000
Total amount : 26015000
1. RTO (real-time)
2. SKN
3. RTGS
4. BI FAST
Select transfer method : 3
Please type yes to confirm the transaction : no
Transfer is cancelled
E:\SEMESTER 4\Konstruksi Perangkat Lunak\Praktikum\Modul 7\jurnal7_1302204051\bin\Debug\net6.0\jurnal7_1302204051.exe (process 22764) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```

Lang “id” :

```
Microsoft Visual Studio Debug Console
Masukkan jumlah uang yang akan di-transfer : 120000
Total biaya : 126500
1. RTO (real-time)
2. SKN
3. RTGS
4. BI FAST
Pilih metode transfer : 4
Ketik ya untuk mengkonfirmasi transaksi : ya
Proses transfer berhasil
E:\SEMESTER 4\Konstruksi Perangkat Lunak\Praktikum\Modul 7\jurnal7_1302204051\bin\Debug\net6.0\jurnal7_1302204051.exe (process 24608) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```

```
Microsoft Visual Studio Debug Console

Masukkan jumlah uang yang akan di-transfer : 27000000
Total biaya : 27015000
Pilih metode transfer : 4
Ketik ya untuk mengkonfirmasi transaksi : gak ya
transfer dibatalkan

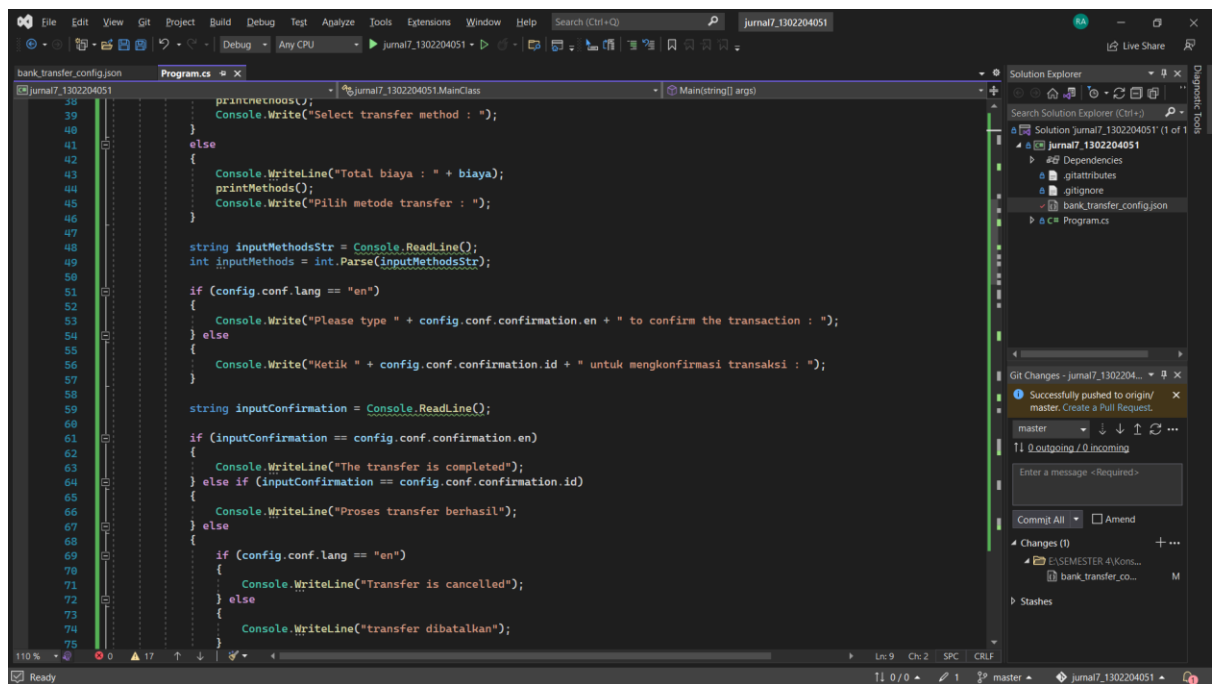
E:\SEMESTER 4\Konstruksi Perangkat Lunak\Praktikum\Modul 7\jurnal7_1302204051\bin\Debug\net6.0\jurnal7_1302204051.exe (p
rocess 1560) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the cons
ole when debugging stops.
Press any key to close this window . . .

if (config.conf.lang == "en")
{
    Console.WriteLine("Transfer is cancelled.");
}
else
{
    Console.WriteLine("Transfer is cancelled.");
}
}
```

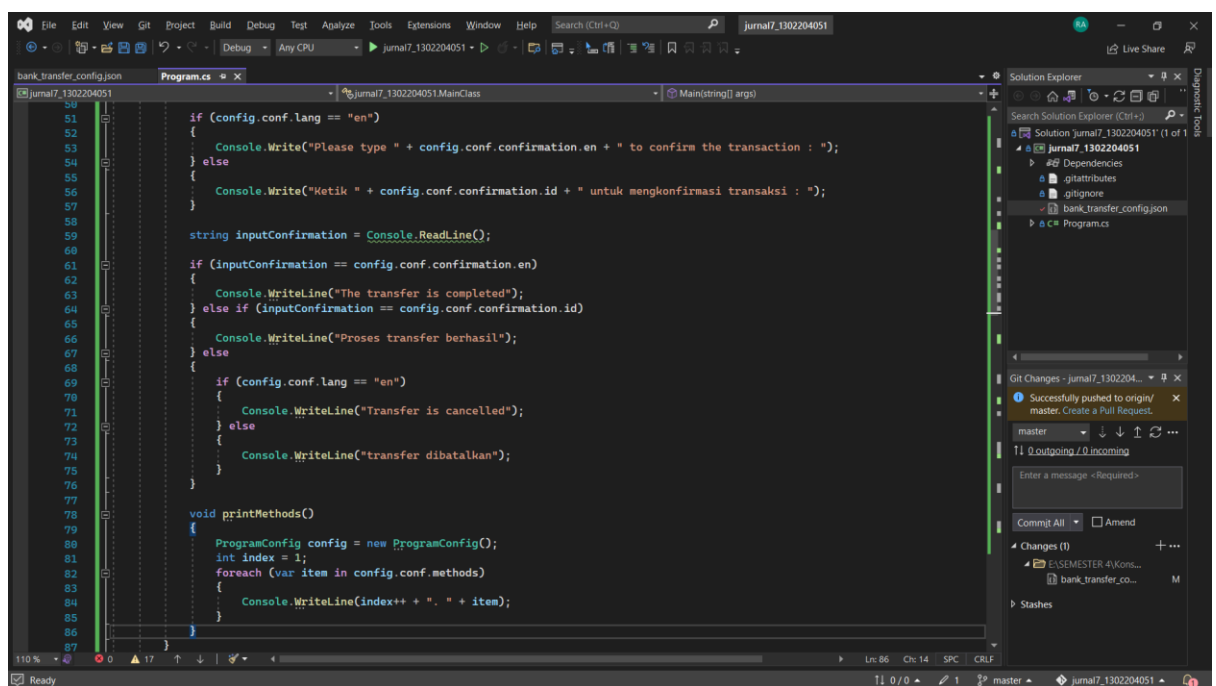
Class MainClass :

```
File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help Search (Ctrl+Q) jurnal7_1302204051
Debug Any CPU jurnal7_1302204051
bank_transfer_config.json Program.cs x jurnal7_1302204051 MainClass Main(string[] args)

7 namespace jurnal7_1302204051
8
9
10 class MainClass
11 {
12     public static void Main(string[] args)
13     {
14         ProgramConfig config = new ProgramConfig();
15
16         if (config.conf.lang == "en")
17         {
18             Console.WriteLine("Please insert the amount of money to transfer : ");
19         }
20         else
21         {
22             Console.WriteLine("Masukkan jumlah uang yang akan di-transfer : ");
23         }
24
25         string biayaStr = Console.ReadLine();
26         int biaya = int.Parse(biayaStr);
27
28         if (biaya <= config.conf.transfer.threshold)
29         {
30             biaya += config.conf.transfer.low_fee;
31         }
32         else
33         {
34             biaya += config.conf.transfer.high_fee;
35         }
36
37         if (config.conf.lang == "en")
38         {
39             Console.WriteLine("Total amount : " + biaya);
40             printMethods();
41             Console.WriteLine("Select transfer method : ");
42         }
43         else
44         {
45             Console.WriteLine("Total amount : " + biaya);
46             printMethods();
47             Console.WriteLine("Pilih metode transfer : ");
48         }
49
50         string metodeStr = Console.ReadLine();
51         int metode = int.Parse(metodeStr);
52
53         if (metode == 1)
54         {
55             Console.WriteLine("RTO (real-time)");
56         }
57         else if (metode == 2)
58         {
59             Console.WriteLine("SKN");
60         }
61         else if (metode == 3)
62         {
63             Console.WriteLine("RTGS");
64         }
65         else if (metode == 4)
66         {
67             Console.WriteLine("BI FAST");
68         }
69         else
70         {
71             Console.WriteLine("Invalid method");
72         }
73
74         Console.WriteLine("Ketik ya untuk mengkonfirmasi transaksi : ");
75         string konfirmasiStr = Console.ReadLine();
76         bool konfirmasi = konfirmasiStr == "ya";
77
78         if (konfirmasi)
79         {
80             Console.WriteLine("Transfer successful");
81         }
82         else
83         {
84             Console.WriteLine("Transfer is cancelled");
85         }
86     }
87 }
```



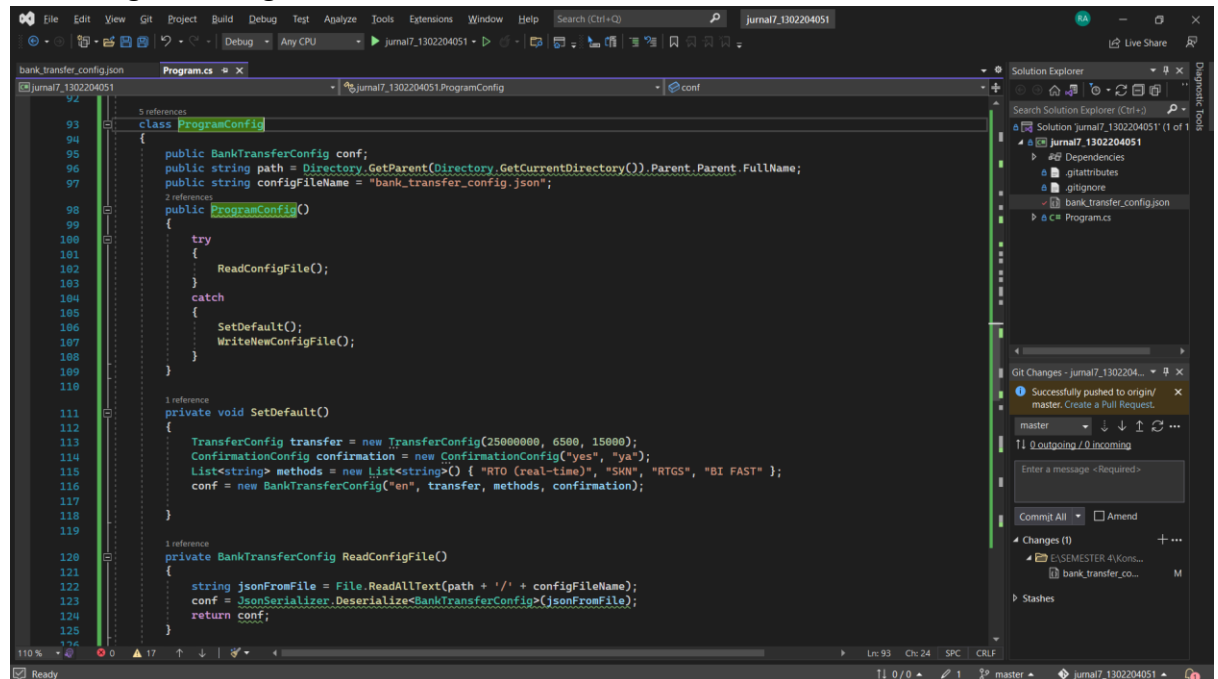
```
38 printMethods();
39 Console.WriteLine("Select transfer method : ");
40
41 }
42 else
43 {
44     Console.WriteLine("Total biaya : " + biaya);
45     printMethods();
46     Console.WriteLine("Pilih metode transfer : ");
47 }
48
49 string inputMethodsStr = Console.ReadLine();
50 int inputMethods = int.Parse(inputMethodsStr);
51
52 if (config.conf.lang == "en")
53 {
54     Console.WriteLine("Please type " + config.conf.confirmation.en + " to confirm the transaction : ");
55 } else
56 {
57     Console.WriteLine("Ketik " + config.conf.confirmation.id + " untuk mengkonfirmasi transaksi : ");
58 }
59
60 string inputConfirmation = Console.ReadLine();
61
62 if (inputConfirmation == config.conf.confirmation.en)
63 {
64     Console.WriteLine("The transfer is completed");
65 } else if (inputConfirmation == config.conf.confirmation.id)
66 {
67     Console.WriteLine("Proses transfer berhasil");
68 } else
69 {
70     if (config.conf.lang == "en")
71     {
72         Console.WriteLine("Transfer is cancelled");
73     } else
74     {
75         Console.WriteLine("transfer dibatalkan");
76     }
77 }
78
79 void printMethods()
80 {
81     ProgramConfig config = new ProgramConfig();
82     int index = 1;
83     foreach (var item in config.conf.methods)
84     {
85         Console.WriteLine(index++ + ". " + item);
86     }
87 }
```



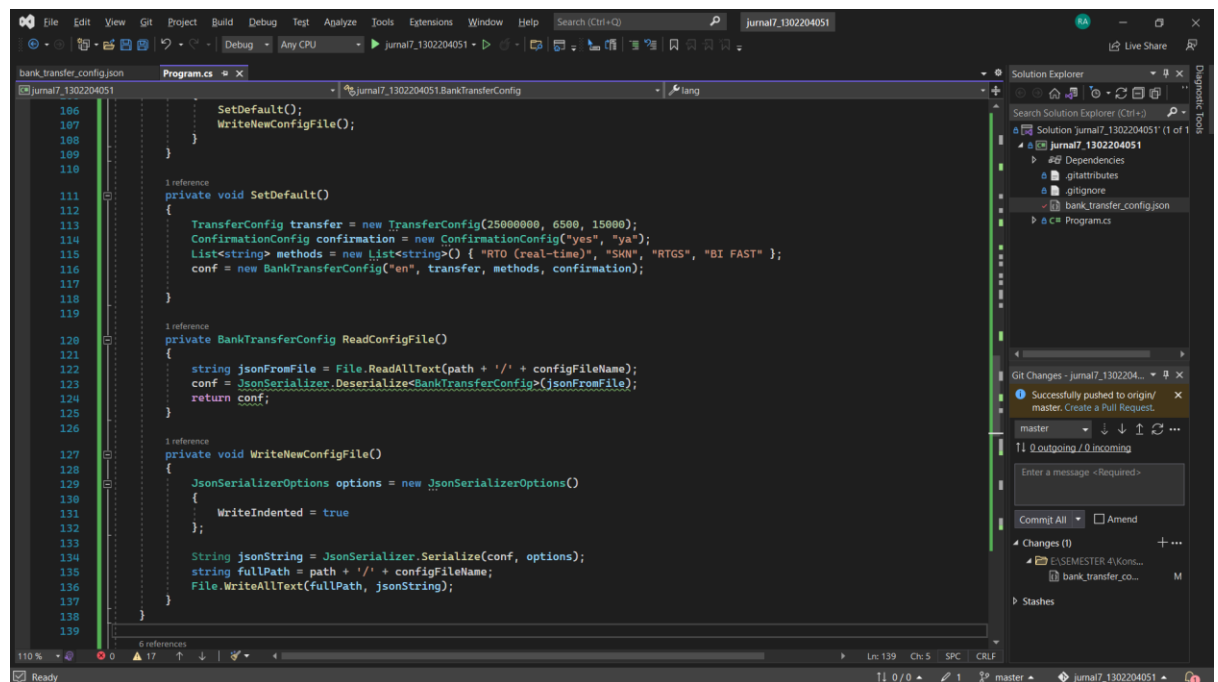
```
51 if (config.conf.lang == "en")
52 {
53     Console.WriteLine("Please type " + config.conf.confirmation.en + " to confirm the transaction : ");
54 } else
55 {
56     Console.WriteLine("Ketik " + config.conf.confirmation.id + " untuk mengkonfirmasi transaksi : ");
57 }
58
59 string inputConfirmation = Console.ReadLine();
60
61 if (inputConfirmation == config.conf.confirmation.en)
62 {
63     Console.WriteLine("The transfer is completed");
64 } else if (inputConfirmation == config.conf.confirmation.id)
65 {
66     Console.WriteLine("Proses transfer berhasil");
67 } else
68 {
69     if (config.conf.lang == "en")
70     {
71         Console.WriteLine("Transfer is cancelled");
72     } else
73     {
74         Console.WriteLine("transfer dibatalkan");
75     }
76 }
77
78 void printMethods()
79 {
80     ProgramConfig config = new ProgramConfig();
81     int index = 1;
82     foreach (var item in config.conf.methods)
83     {
84         Console.WriteLine(index++ + ". " + item);
85     }
86 }
87 }
```

Pada Class MainClass terdapat pembuatan objek config dan alur untuk soal seperti input dan output.

Class ProgramConfig :



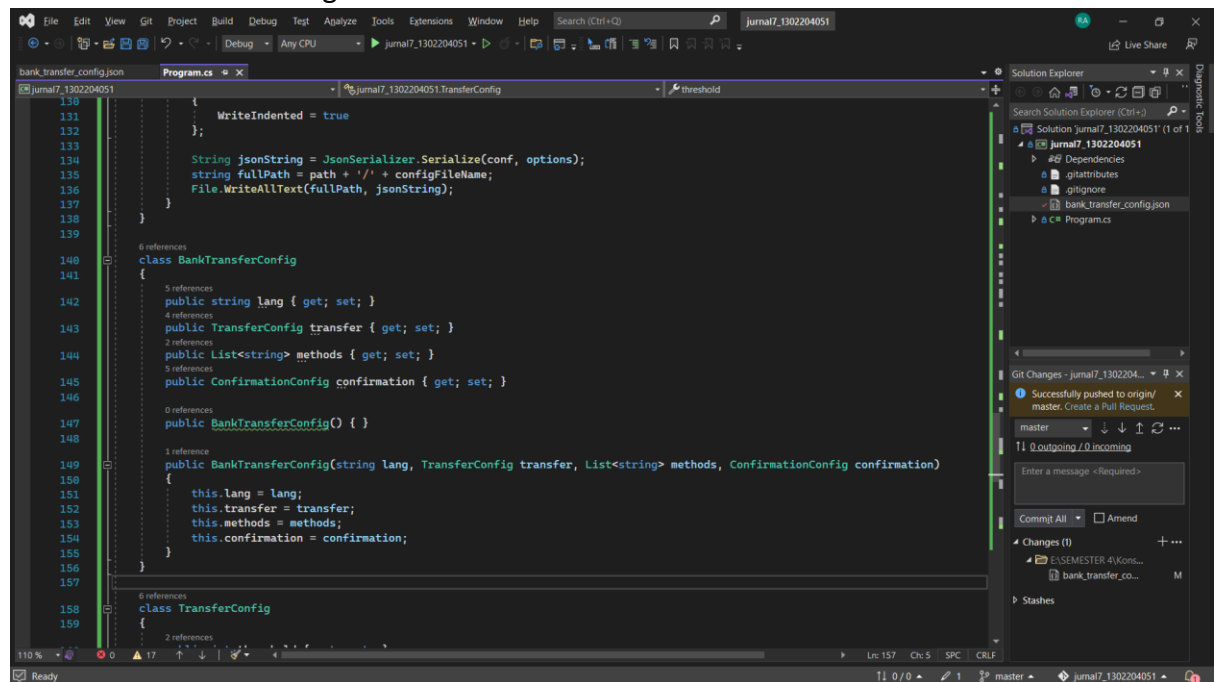
```
93 class ProgramConfig
94 {
95     public BankTransferConfig conf;
96     public string path = Directory.GetParent(Directory.GetCurrentDirectory()).Parent.FullName;
97     public string configFileName = "bank_transfer_config.json";
98     public ProgramConfig()
99     {
100         try
101         {
102             ReadConfigFile();
103         }
104         catch
105         {
106             SetDefault();
107             WriteNewConfigFile();
108         }
109     }
110
111     1 reference
112     private void SetDefault()
113     {
114         TransferConfig transfer = new TransferConfig(250000000, 6500, 15000);
115         ConfirmationConfig confirmation = new ConfirmationConfig("yes", "ya");
116         List<string> methods = new List<string>() { "RTIO (real-time)", "SKWN", "RTGS", "BI FAST" };
117         conf = new BankTransferConfig("en", transfer, methods, confirmation);
118     }
119
120     1 reference
121     private BankTransferConfig ReadConfigFile()
122     {
123         string jsonFromFile = File.ReadAllText(path + '/' + configFileName);
124         conf = JsonSerializer.Deserialize<BankTransferConfig>(jsonFromFile);
125         return conf;
126     }
127 }
```



```
127     private void WriteNewConfigFile()
128     {
129         JsonSerializerOptions options = new JsonSerializerOptions()
130         {
131             WriteIndented = true
132         };
133
134         String jsonString = JsonSerializer.Serialize(conf, options);
135         string fullPath = path + '/' + configFileName;
136         File.WriteAllText(fullPath, jsonString);
137     }
138 }
```

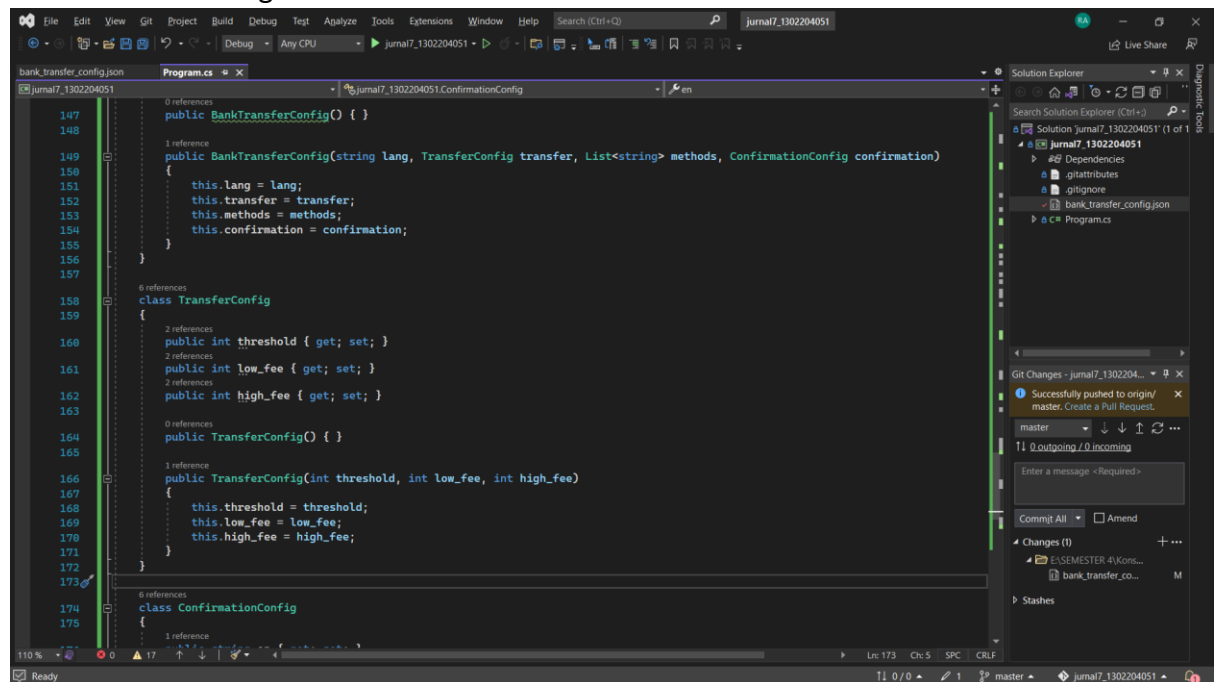
Di Class ini terdapat pembuatan file json, dan method untuk read, write serta membuat config default.

Class BankTransferConfig :



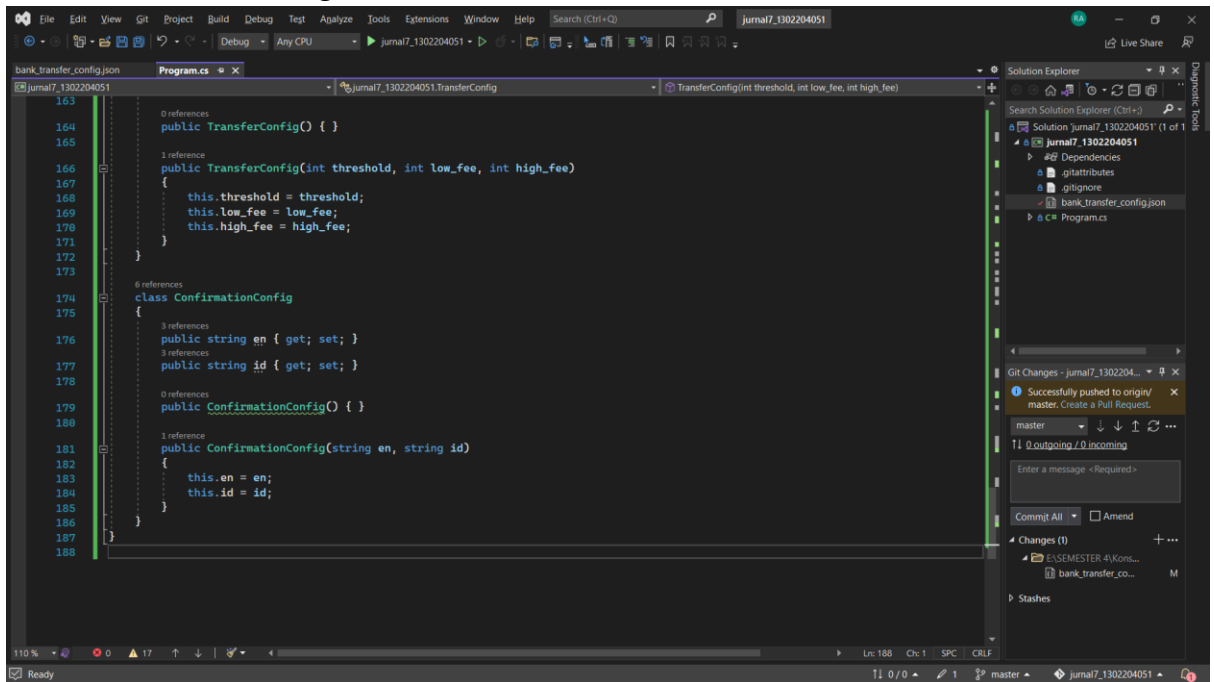
Class ini merupakan class pembentuk key dan value json yang dibuat file nya. Value ada yang berupa objek maka harus dibuat lagi class nya sedangkan yang berbentuk array menggunakan list.

Class TransferConfig :



Class ini merupakan pembentuk key transfer, karena value nya berupa objek jadi harus dibuat dulu class nya.

Class ConfirmationConfig :



Sama seperti `TransferConfig`, pada class ini juga merupakan pembentuk key confirmation yang berupa objek, maka dari itu harus dibuat dulu class nya.