

## CODE:

```
package com.company;
import java.io.*;
import java.text.DecimalFormat;
import java.util.Hashtable;
import java.io.FileNotFoundException;
import java.util.LinkedHashMap;
import java.util.Map;
import java.util.Scanner;

public class Main {

    public static void main(String[] args) {

        int LC = 0, SC = 0;

        Hashtable<String,String> IS=new Hashtable<String,String>();
        Hashtable<String,String> DL=new Hashtable<String,String>();
        Hashtable<String,String> AD=new Hashtable<String,String>();
        Hashtable<String, String> REG = new Hashtable<String,String>();
        LinkedHashMap<String, String> ST = new LinkedHashMap<String, String>();

        String arr[] =
{"STOP","ADD","SUB","MULT","MOVER","MOVEM","COMP","BC","DIV","READ","PRINT"};
        String arr1[] = {"DC","DS"};
        String arr2[] = {"START","END","ORIGIN","EQU","LTORG"};
        String arr3[] = {"AREG","BREG","CREG","DREG"};

        boolean st_found = false;
        boolean ds_found = false;
        boolean dc_found = false;
        boolean code_start = true;

        String st, start = "START", ds = "DS", dc = "DC";

        for(int i=0;i<=10;i++){
            DecimalFormat twodigits = new DecimalFormat("00");
            IS.put(arr[i],twodigits.format(i));
        }

        for(int i=0;i<=1;i++){
            DecimalFormat twodigits = new DecimalFormat("00");
            DL.put(arr1[i],String.valueOf(twodigits.format(i+1)));
        }

        for(int i=0;i<=4;i++){
            DecimalFormat twodigits = new DecimalFormat("00");
            AD.put(arr2[i],String.valueOf(twodigits.format(i+1)));
        }
    }
}
```