**MOS PHASE-I**

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**CLASS: IT-B BATCH: 2**

**DATE OF PERFORMANCE: 10/08/2024**

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# CODE:

import java.io.\*;  
import java.util.Arrays;  
  
public class Phase1 {  
  
// Memory access is only for OS functions  
 private char M[][] = new char[100][4];  
  
// Private Access to OS Function  
 private char IR[] = new char[4];  
 private int IC;  
 private char R[] = new char[4];  
 private boolean C;  
  
 private int PID;  
 private int TTL;  
 private int TLL;  
  
 private int SI;  
  
 private String input\_File;  
 private String output\_File;  
  
 private BufferedReader bReader;  
 private BufferedWriter bWriter;  
  
 Phase1(String inputfile, String outputfile) throws Exception  
 {  
 this.input\_File = inputfile;  
 this.output\_File = outputfile;  
 File fileR = new File(input\_File);  
 File fileW = new File(output\_File);  
 bReader = new BufferedReader(new FileReader(fileR));  
 bWriter = new BufferedWriter(new FileWriter(fileW));  
 }  
  
  
  
 private boolean cardReader[] = new boolean[2];  
// 0 = Control card || 1 = Data card  
  
// Private Functions  
  
// 1. LOAD function  
 private void LOAD() throws Exception  
 {  
  
 String Reader = bReader.readLine();  
 int row = 0;  
 int col = 0;  
 while(Reader!=null)  
 {  
// System.out.println(Reader);  
// Loading Logic  
// Loading Control Card Data  
 if(Reader.contains("$AMJ"))  
 {  
// PID,TTL,TLL  
 int temp[] = new int[3];  
 int j =0;  
 for(int i=4;i<Reader.length();i+=4)  
 {  
 temp[j] = Integer.*parseInt*(Reader.substring(i,i+4));  
 }  
 PID = temp[0];  
 TTL = temp[1];  
 TLL = temp[2];  
 cardReader[0] = true;  
 }  
 else if(Reader.contains("$DTA"))  
 {  
 STARTEXECUTION();  
 cardReader[1] = true;  
 }  
 else if(Reader.contains("$END"))  
 {  
 printMemory();  
 INIT();  
 row=0;  
 col =0;  
 }  
 else if(!Reader.contains("$") && cardReader[0] && !cardReader[1])  
 {  
// Reading Program Card  
// System.out.println(Reader);  
  
 if(Reader.length()>40)  
 {  
 Reader = Reader.substring(0,40);  
 }  
 for(char i : Reader.toCharArray())  
 {  
 if(row<100) {  
 M[row][col % 4] = i;  
 col++;  
 }else{  
 System.out.println("Memory Limit Exceed!!");  
 }  
 if(col%4==0)  
 {  
 row++;  
 }  
 }  
 }  
  
  
 Reader = bReader.readLine();  
 }  
  
 }  
  
// 2. INIT function  
 private void INIT()  
 {  
 for(char arr[] : this.M)  
 {  
 Arrays.*fill*(arr,' ');  
 }  
  
 this.IC = 0;  
 Arrays.*fill*(this.R,' ');  
 Arrays.*fill*(this.IR,' ');  
 this.C = false;  
 Arrays.*fill*(this.cardReader,false);  
 this.SI = -1;  
 }  
  
// 3. Print Memory  
 private void printMemory()  
 {  
 for(int i = 0;i<M.length;i++)  
 {  
 System.out.println(i+" "+Arrays.*toString*(M[i]));  
 }  
 }  
  
  
// 4. STARTEXECUTION program  
 private void STARTEXECUTION() throws Exception  
 {  
 this.IC = 0;  
 EXECUTEUSERPROGRAM();  
 }  
  
// 5. EXECUTEUSERPROGRAM  
  
 private void EXECUTEUSERPROGRAM() throws Exception  
 {  
 boolean loop = true;  
 while(loop)  
 {  
// Loading Instruction in IR  
 int j = 0;  
 for(char i : M[IC])  
 {  
 IR[j] = i;  
 j++;  
 }  
// Increment Instruction Counter by 1  
 IC = IC + 1;  
  
// Separating Operand and Opcode  
 StringBuilder operand = new StringBuilder();  
 StringBuilder opcode = new StringBuilder();  
 if(IR[0]=='H')  
 {  
 opcode.append(IR[0]);  
 }  
 else {  
 opcode.append(IR[0]);  
 opcode.append(IR[1]);  
 operand.append(IR[2]);  
 operand.append(IR[3]);  
 }  
  
 System.out.println("Opcode : "+opcode);  
 System.out.println("Operand : "+operand);  
  
 switch (opcode.toString())  
 {  
 case "GD" :  
 SI = 1;  
 MOS(Integer.*parseInt*(operand.toString()));  
 break;  
 case "PD":  
 SI = 2;  
 MOS(Integer.*parseInt*(operand.toString()));  
 break;  
 case "H":  
 SI = 3;  
 MOS(0);  
 loop = false;  
 break;  
 case "LR":  
// Storing the data from Memory -----> Register  
 j=0;  
 for(char i : M[Integer.*parseInt*(operand.toString())])  
 {  
 R[j] = i;  
 j++;  
 }  
 System.out.println(Arrays.*toString*(R));  
 break;  
 case "SR":  
// Loading the data from Register ----> Memory  
 j = 0;  
 for(char i : R)  
 {  
 M[Integer.*parseInt*(operand.toString())][j] = i;  
 j++;  
 }  
 break;  
 case "CR":  
// Comparing the data of Register -----> Memory  
 int c = 0;  
 j=0;  
 for(char i : R)  
 {  
 if(M[Integer.*parseInt*(operand.toString())][j] == i)  
 {  
 c++;  
 }  
 j++;  
 }  
 System.out.println(c);  
// System.out.println(Arrays.toString(M[Integer.parseInt(operand.toString())]));  
// System.out.println(Arrays.toString(R));  
 if(c==4)  
 {  
 this.C = true;  
 }  
 break;  
 case "BT":  
 if(C) {  
 this.IC = Integer.*parseInt*(operand.toString());  
 System.out.println("IC = "+IC);  
 }  
 break;  
 default:  
 System.out.println("Invalide Command Or Command Not Found");  
 break;  
 }  
 }  
  
 }  
  
 private void MOS(int operand) throws Exception  
 {  
 switch (SI)  
 {  
 case 1:  
 READ(operand);  
 break;  
 case 2:  
 WRITE(operand);  
 break;  
 case 3:  
 TERMINATE();  
 break;  
 default:  
 System.out.println("Invalide MOS!");  
 }  
 }  
  
 private void READ(int location) throws Exception  
 {  
 String Data = bReader.readLine();  
 System.out.println(Data);  
 int col = 0;  
 for(char i : Data.toCharArray())  
 {  
 M[location][col%4] = i;  
 col++;  
 if(col%4==0)  
 {  
 location++;  
 }  
 if(location>99)  
 {  
 System.out.println("Memory Exceed!");  
 break;  
 }  
 }  
 }  
  
 private void WRITE(int location) throws Exception  
 {  
 int col = 0;  
 char i = M[location][col];  
 StringBuilder Data = new StringBuilder();  
 int j = location;  
 while(j<location+10)  
 {  
 Data.append(i);  
 col++;  
 if(col%4==0)  
 {  
 j++;  
 }  
 if(j>99)  
 {  
 System.out.println("Memory Exceed!");  
 break;  
 }  
 i = M[j][col%4];  
 }  
 bWriter.write(Data.toString());  
 bWriter.newLine();  
 }  
  
 private void TERMINATE() throws Exception  
 {  
 bWriter.write("\n");  
 bWriter.write("\n");  
 }  
  
  
 public static void main(String[] args) throws Exception {  
 String InputFile = "O:\\OS\\Phase1\\My Phase\\Phase 1\\Input.txt";  
 String OutputFile = "O:\\OS\\Phase1\\My Phase\\Phase 1\\output.txt";  
 Phase1 p1 = new Phase1(InputFile,OutputFile);  
 p1.INIT();  
 p1.LOAD();  
 p1.bWriter.close();  
 }  
}

# Input File:

$AMJ010200210001  
GD30LR36SR40LR35SR41LR34SR42LR33SR43LR32  
SR44LR31SR45LR30SR46LR39SR47SR38SR49PD40  
H  
$DTA control card  
AMA PANANAL A CPLANN A A MA  
$END0102  
$AMJ020100120003  
GD20LR20GD30CR33BT07GD40PD40PD20PD30GD40  
PD40H  
$DTA  
HOPE FOR IT  
THERE IS NO HOPE  
BUT STILL HOPE  
$END0201  
$AMJ000300170007  
GD20PD20GD30PD30GD40LR40SR20PD20PD30GD40  
LR40SR20PD20PD30GD50PD50H  
$DTA  
3 LITTLE PIGS WENT TO OS CLASS.  
THE WOLF ATE ONE!  
2 LI  
1 LI  
CLASS DISMISSED!  
$END0003  
$AMJ020200160005  
GD20PD20LR20SR30SR31PD30SR40SR41SR42PD40  
SR50SR51PD50SR60PD60H  
$DTA  
\*  
$END0202  
$AMJ000700200002  
GD50LR50SR67LR51SR66LR52SR65LR53SR64LR54  
SR63LR55SR62LR56SR61LR57SR60PD50PD60H  
$DTA  
 N U T R A F I N  
$END0007  
$AMJ030100100003  
GD20PD20GD30PD30LR20CR30BT10GD40PD40H  
$DTA  
VIT IS GOOD  
VIIT IS GOOD  
BOTH ARE SISTER INSTITUTES  
$END0301  
$AMJ030200080003  
GD20PD20GD30PD30LR30SR20PD20H  
$DTA  
CAT CAN EAT RAT  
RAT CAN NOT EAT CAT  
$END0302  
$AMJ010100040001  
GD20LR22SR25PD20H  
$DTA  
I LIKE THIS PEN OF  
$END0101  
$AMJ040100120004  
GD20PD20GD30PD30GD40GD50LR20CR30BT10PD40  
PD50H  
$DTA  
ABCD  
ABCD  
DO NOT  
MATCH  
$END0401  
$AMJ040200130004  
GD20PD20GD30LR30SR20PD20GD40PD40GD50LR50  
SR20PD20H  
$DTA  
 RAT  
 S  
 ON  
 M  
$END0402  
$AMJ010200070002  
GD20LR26CR20BT06GD30PD30PD20H  
$DTA  
RAM IS OLDER THAN SHRIRAM  
NOT IN EXISTANCE  
$END0102

# Output File:

A MAN A PLAN A CANAL PANAMA   
  
  
HOPE FOR IT   
THERE IS NO HOPE   
BUT STILL HOPE   
  
  
3 LITTLE PIGS WENT TO OS CLASS.   
THE WOLF ATE ONE!   
2 LITTLE PIGS WENT TO OS CLASS.   
THE WOLF ATE ONE!   
1 LITTLE PIGS WENT TO OS CLASS.   
THE WOLF ATE ONE!   
CLASS DISMISSED!   
  
  
\*   
\* \*   
\* \* \*   
\* \*   
\*   
  
  
 N U T R A F I N   
 N I F A R T U N   
  
  
VIT IS GOOD   
VIIT IS GOOD   
BOTH ARE SISTER INSTITUTES   
  
  
CAT CAN EAT RAT   
RAT CAN NOT EAT CAT   
RAT CAN EAT RAT   
  
  
I LIKE THIS PEN OF HIS   
  
  
ABCD   
ABCD   
MATCH   
  
  
 RAT   
 SAT   
 ON   
 MAT   
  
  
RAM IS OLDER THAN SHRIRAM

# Console OUTPUT:

"C:\Program Files\Java\jdk-21\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2022.3.3\lib\idea\_rt.jar=55409:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2022.3.3\bin" -Dfile.encoding=UTF-8 -Dsun.stdout.encoding=UTF-8 -Dsun.stderr.encoding=UTF-8 -classpath "O:\OS\Phase1\My Phase\Phase 1\out\production\Phase 1" Phase1

Opcode : GD

Operand : 30

AMA PANANAL A CPLANN A A MA

Opcode : LR

Operand : 36

[A, , M, A]

Opcode : SR

Operand : 40

Opcode : LR

Operand : 35

[N, , A, ]

Opcode : SR

Operand : 41

Opcode : LR

Operand : 34

[P, L, A, N]

Opcode : SR

Operand : 42

Opcode : LR

Operand : 33

[ , A, , C]

Opcode : SR

Operand : 43

Opcode : LR

Operand : 32

[A, N, A, L]

Opcode : SR

Operand : 44

Opcode : LR

Operand : 31

[ , P, A, N]

Opcode : SR

Operand : 45

Opcode : LR

Operand : 30

[A, M, A, ]

Opcode : SR

Operand : 46

Opcode : LR

Operand : 39

[ , , , ]

Opcode : SR

Operand : 47

Opcode : SR

Operand : 38

Opcode : SR

Operand : 49

Opcode : PD

Operand : 40

Opcode : H

Operand :

0 [G, D, 3, 0]

1 [L, R, 3, 6]

2 [S, R, 4, 0]

3 [L, R, 3, 5]

4 [S, R, 4, 1]

5 [L, R, 3, 4]

6 [S, R, 4, 2]

7 [L, R, 3, 3]

8 [S, R, 4, 3]

9 [L, R, 3, 2]

10 [S, R, 4, 4]

11 [L, R, 3, 1]

12 [S, R, 4, 5]

13 [L, R, 3, 0]

14 [S, R, 4, 6]

15 [L, R, 3, 9]

16 [S, R, 4, 7]

17 [S, R, 3, 8]

18 [S, R, 4, 9]

19 [P, D, 4, 0]

20 [H, , , ]

21 [ , , , ]

22 [ , , , ]

23 [ , , , ]

24 [ , , , ]

25 [ , , , ]

26 [ , , , ]

27 [ , , , ]

28 [ , , , ]

29 [ , , , ]

30 [A, M, A, ]

31 [ , P, A, N]

32 [A, N, A, L]

33 [ , A, , C]

34 [P, L, A, N]

35 [N, , A, ]

36 [A, , M, A]

37 [ , , , ]

38 [ , , , ]

39 [ , , , ]

40 [A, , M, A]

41 [N, , A, ]

42 [P, L, A, N]

43 [ , A, , C]

44 [A, N, A, L]

45 [ , P, A, N]

46 [A, M, A, ]

47 [ , , , ]

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93 [ , , , ]

94 [ , , , ]

95 [ , , , ]

96 [ , , , ]

97 [ , , , ]

98 [ , , , ]

99 [ , , , ]

Opcode : GD

Operand : 20

HOPE FOR IT

Opcode : LR

Operand : 20

[H, O, P, E]

Opcode : GD

Operand : 30

THERE IS NO HOPE

Opcode : CR

Operand : 33

4

Opcode : BT

Operand : 07

IC = 7

Opcode : PD

Operand : 20

Opcode : PD

Operand : 30

Opcode : GD

Operand : 40

BUT STILL HOPE

Opcode : PD

Operand : 40

Opcode : H

Operand :

0 [G, D, 2, 0]

1 [L, R, 2, 0]

2 [G, D, 3, 0]

3 [C, R, 3, 3]

4 [B, T, 0, 7]

5 [G, D, 4, 0]

6 [P, D, 4, 0]

7 [P, D, 2, 0]

8 [P, D, 3, 0]

9 [G, D, 4, 0]

10 [P, D, 4, 0]

11 [H, , , ]

12 [ , , , ]

13 [ , , , ]

14 [ , , , ]

15 [ , , , ]

16 [ , , , ]

17 [ , , , ]

18 [ , , , ]

19 [ , , , ]

20 [H, O, P, E]

21 [ , F, O, R]

22 [ , I, T, ]

23 [ , , , ]

24 [ , , , ]

25 [ , , , ]

26 [ , , , ]

27 [ , , , ]

28 [ , , , ]

29 [ , , , ]

30 [T, H, E, R]

31 [E, , I, S]

32 [ , N, O, ]

33 [H, O, P, E]

34 [ , , , ]

35 [ , , , ]

36 [ , , , ]

37 [ , , , ]

38 [ , , , ]

39 [ , , , ]

40 [B, U, T, ]

41 [S, T, I, L]

42 [L, , H, O]

43 [P, E, , ]

44 [ , , , ]

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48 [ , , , ]

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93 [ , , , ]

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95 [ , , , ]

96 [ , , , ]

97 [ , , , ]

98 [ , , , ]

99 [ , , , ]

Opcode : GD

Operand : 20

3 LITTLE PIGS WENT TO OS CLASS.

Opcode : PD

Operand : 20

Opcode : GD

Operand : 30

THE WOLF ATE ONE!

Opcode : PD

Operand : 30

Opcode : GD

Operand : 40

2 LI

Opcode : LR

Operand : 40

[2, , L, I]

Opcode : SR

Operand : 20

Opcode : PD

Operand : 20

Opcode : PD

Operand : 30

Opcode : GD

Operand : 40

1 LI

Opcode : LR

Operand : 40

[1, , L, I]

Opcode : SR

Operand : 20

Opcode : PD

Operand : 20

Opcode : PD

Operand : 30

Opcode : GD

Operand : 50

CLASS DISMISSED!

Opcode : PD

Operand : 50

Opcode : H

Operand :

0 [G, D, 2, 0]

1 [P, D, 2, 0]

2 [G, D, 3, 0]

3 [P, D, 3, 0]

4 [G, D, 4, 0]

5 [L, R, 4, 0]

6 [S, R, 2, 0]

7 [P, D, 2, 0]

8 [P, D, 3, 0]

9 [G, D, 4, 0]

10 [L, R, 4, 0]

11 [S, R, 2, 0]

12 [P, D, 2, 0]

13 [P, D, 3, 0]

14 [G, D, 5, 0]

15 [P, D, 5, 0]

16 [H, , , ]

17 [ , , , ]

18 [ , , , ]

19 [ , , , ]

20 [1, , L, I]

21 [T, T, L, E]

22 [ , P, I, G]

23 [S, , W, E]

24 [N, T, , T]

25 [O, , O, S]

26 [ , C, L, A]

27 [S, S, ., ]

28 [ , , , ]

29 [ , , , ]

30 [T, H, E, ]

31 [W, O, L, F]

32 [ , A, T, E]

33 [ , O, N, E]

34 [!, , , ]

35 [ , , , ]

36 [ , , , ]

37 [ , , , ]

38 [ , , , ]

39 [ , , , ]

40 [1, , L, I]

41 [ , , , ]

42 [ , , , ]

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45 [ , , , ]

46 [ , , , ]

47 [ , , , ]

48 [ , , , ]

49 [ , , , ]

50 [C, L, A, S]

51 [S, , D, I]

52 [S, M, I, S]

53 [S, E, D, !]

54 [ , , , ]

55 [ , , , ]

56 [ , , , ]

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99 [ , , , ]

Opcode : GD

Operand : 20

\*

Opcode : PD

Operand : 20

Opcode : LR

Operand : 20

[\*, , , ]

Opcode : SR

Operand : 30

Opcode : SR

Operand : 31

Opcode : PD

Operand : 30

Opcode : SR

Operand : 40

Opcode : SR

Operand : 41

Opcode : SR

Operand : 42

Opcode : PD

Operand : 40

Opcode : SR

Operand : 50

Opcode : SR

Operand : 51

Opcode : PD

Operand : 50

Opcode : SR

Operand : 60

Opcode : PD

Operand : 60

Opcode : H

Operand :

0 [G, D, 2, 0]

1 [P, D, 2, 0]

2 [L, R, 2, 0]

3 [S, R, 3, 0]

4 [S, R, 3, 1]

5 [P, D, 3, 0]

6 [S, R, 4, 0]

7 [S, R, 4, 1]

8 [S, R, 4, 2]

9 [P, D, 4, 0]

10 [S, R, 5, 0]

11 [S, R, 5, 1]

12 [P, D, 5, 0]

13 [S, R, 6, 0]

14 [P, D, 6, 0]

15 [H, , , ]

16 [ , , , ]

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98 [ , , , ]

99 [ , , , ]

Opcode : GD

Operand : 50

N U T R A F I N

Opcode : LR

Operand : 50

[ , , , N]

Opcode : SR

Operand : 67

Opcode : LR

Operand : 51

[ , , , U]

Opcode : SR

Operand : 66

Opcode : LR

Operand : 52

[ , , , T]

Opcode : SR

Operand : 65

Opcode : LR

Operand : 53

[ , , , R]

Opcode : SR

Operand : 64

Opcode : LR

Operand : 54

[ , , , A]

Opcode : SR

Operand : 63

Opcode : LR

Operand : 55

[ , , , F]

Opcode : SR

Operand : 62

Opcode : LR

Operand : 56

[ , , , I]

Opcode : SR

Operand : 61

Opcode : LR

Operand : 57

[ , , , N]

Opcode : SR

Operand : 60

Opcode : PD

Operand : 50

Opcode : PD

Operand : 60

Opcode : H

Operand :

0 [G, D, 5, 0]

1 [L, R, 5, 0]

2 [S, R, 6, 7]

3 [L, R, 5, 1]

4 [S, R, 6, 6]

5 [L, R, 5, 2]

6 [S, R, 6, 5]

7 [L, R, 5, 3]

8 [S, R, 6, 4]

9 [L, R, 5, 4]

10 [S, R, 6, 3]

11 [L, R, 5, 5]

12 [S, R, 6, 2]

13 [L, R, 5, 6]

14 [S, R, 6, 1]

15 [L, R, 5, 7]

16 [S, R, 6, 0]

17 [P, D, 5, 0]

18 [P, D, 6, 0]

19 [H, , , ]

20 [ , , , ]

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49 [ , , , ]

50 [ , , , N]

51 [ , , , U]

52 [ , , , T]

53 [ , , , R]

54 [ , , , A]

55 [ , , , F]

56 [ , , , I]

57 [ , , , N]

58 [ , , , ]

59 [ , , , ]

60 [ , , , N]

61 [ , , , I]

62 [ , , , F]

63 [ , , , A]

64 [ , , , R]

65 [ , , , T]

66 [ , , , U]

67 [ , , , N]

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96 [ , , , ]

97 [ , , , ]

98 [ , , , ]

99 [ , , , ]

Opcode : GD

Operand : 20

VIT IS GOOD

Opcode : PD

Operand : 20

Opcode : GD

Operand : 30

VIIT IS GOOD

Opcode : PD

Operand : 30

Opcode : LR

Operand : 20

[V, I, T, ]

Opcode : CR

Operand : 30

2

Opcode : BT

Operand : 10

Opcode : GD

Operand : 40

BOTH ARE SISTER INSTITUTES

Opcode : PD

Operand : 40

Opcode : H

Operand :

0 [G, D, 2, 0]

1 [P, D, 2, 0]

2 [G, D, 3, 0]

3 [P, D, 3, 0]

4 [L, R, 2, 0]

5 [C, R, 3, 0]

6 [B, T, 1, 0]

7 [G, D, 4, 0]

8 [P, D, 4, 0]

9 [H, , , ]

10 [ , , , ]

11 [ , , , ]

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14 [ , , , ]

15 [ , , , ]

16 [ , , , ]

17 [ , , , ]

18 [ , , , ]

19 [ , , , ]

20 [V, I, T, ]

21 [I, S, , G]

22 [O, O, D, ]

23 [ , , , ]

24 [ , , , ]

25 [ , , , ]

26 [ , , , ]

27 [ , , , ]

28 [ , , , ]

29 [ , , , ]

30 [V, I, I, T]

31 [ , I, S, ]

32 [G, O, O, D]

33 [ , , , ]

34 [ , , , ]

35 [ , , , ]

36 [ , , , ]

37 [ , , , ]

38 [ , , , ]

39 [ , , , ]

40 [B, O, T, H]

41 [ , A, R, E]

42 [ , S, I, S]

43 [T, E, R, ]

44 [I, N, S, T]

45 [I, T, U, T]

46 [E, S, , ]

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98 [ , , , ]

99 [ , , , ]

Opcode : GD

Operand : 20

CAT CAN EAT RAT

Opcode : PD

Operand : 20

Opcode : GD

Operand : 30

RAT CAN NOT EAT CAT

Opcode : PD

Operand : 30

Opcode : LR

Operand : 30

[R, A, T, ]

Opcode : SR

Operand : 20

Opcode : PD

Operand : 20

Opcode : H

Operand :

0 [G, D, 2, 0]

1 [P, D, 2, 0]

2 [G, D, 3, 0]

3 [P, D, 3, 0]

4 [L, R, 3, 0]

5 [S, R, 2, 0]

6 [P, D, 2, 0]

7 [H, , , ]

8 [ , , , ]

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14 [ , , , ]

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18 [ , , , ]

19 [ , , , ]

20 [R, A, T, ]

21 [C, A, N, ]

22 [E, A, T, ]

23 [R, A, T, ]

24 [ , , , ]

25 [ , , , ]

26 [ , , , ]

27 [ , , , ]

28 [ , , , ]

29 [ , , , ]

30 [R, A, T, ]

31 [C, A, N, ]

32 [N, O, T, ]

33 [E, A, T, ]

34 [C, A, T, ]

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97 [ , , , ]

98 [ , , , ]

99 [ , , , ]

Opcode : GD

Operand : 20

I LIKE THIS PEN OF

Opcode : LR

Operand : 22

[H, I, S, ]

Opcode : SR

Operand : 25

Opcode : PD

Operand : 20

Opcode : H

Operand :

0 [G, D, 2, 0]

1 [L, R, 2, 2]

2 [S, R, 2, 5]

3 [P, D, 2, 0]

4 [H, , , ]

5 [ , , , ]

6 [ , , , ]

7 [ , , , ]

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9 [ , , , ]

10 [ , , , ]

11 [ , , , ]

12 [ , , , ]

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16 [ , , , ]

17 [ , , , ]

18 [ , , , ]

19 [ , , , ]

20 [I, , L, I]

21 [K, E, , T]

22 [H, I, S, ]

23 [P, E, N, ]

24 [O, F, , ]

25 [H, I, S, ]

26 [ , , , ]

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95 [ , , , ]

96 [ , , , ]

97 [ , , , ]

98 [ , , , ]

99 [ , , , ]

Opcode : GD

Operand : 20

ABCD

Opcode : PD

Operand : 20

Opcode : GD

Operand : 30

ABCD

Opcode : PD

Operand : 30

Opcode : GD

Operand : 40

DO NOT

Opcode : GD

Operand : 50

MATCH

Opcode : LR

Operand : 20

[A, B, C, D]

Opcode : CR

Operand : 30

4

Opcode : BT

Operand : 10

IC = 10

Opcode : PD

Operand : 50

Opcode : H

Operand :

0 [G, D, 2, 0]

1 [P, D, 2, 0]

2 [G, D, 3, 0]

3 [P, D, 3, 0]

4 [G, D, 4, 0]

5 [G, D, 5, 0]

6 [L, R, 2, 0]

7 [C, R, 3, 0]

8 [B, T, 1, 0]

9 [P, D, 4, 0]

10 [P, D, 5, 0]

11 [H, , , ]

12 [ , , , ]

13 [ , , , ]

14 [ , , , ]

15 [ , , , ]

16 [ , , , ]

17 [ , , , ]

18 [ , , , ]

19 [ , , , ]

20 [A, B, C, D]

21 [ , , , ]

22 [ , , , ]

23 [ , , , ]

24 [ , , , ]

25 [ , , , ]

26 [ , , , ]

27 [ , , , ]

28 [ , , , ]

29 [ , , , ]

30 [A, B, C, D]

31 [ , , , ]

32 [ , , , ]

33 [ , , , ]

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40 [D, O, , N]

41 [O, T, , ]

42 [ , , , ]

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47 [ , , , ]

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49 [ , , , ]

50 [M, A, T, C]

51 [H, , , ]

52 [ , , , ]

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95 [ , , , ]

96 [ , , , ]

97 [ , , , ]

98 [ , , , ]

99 [ , , , ]

Opcode : GD

Operand : 20

RAT

Opcode : PD

Operand : 20

Opcode : GD

Operand : 30

S

Opcode : LR

Operand : 30

[ , , , S]

Opcode : SR

Operand : 20

Opcode : PD

Operand : 20

Opcode : GD

Operand : 40

ON

Opcode : PD

Operand : 40

Opcode : GD

Operand : 50

M

Opcode : LR

Operand : 50

[ , , , M]

Opcode : SR

Operand : 20

Opcode : PD

Operand : 20

Opcode : H

Operand :

0 [G, D, 2, 0]

1 [P, D, 2, 0]

2 [G, D, 3, 0]

3 [L, R, 3, 0]

4 [S, R, 2, 0]

5 [P, D, 2, 0]

6 [G, D, 4, 0]

7 [P, D, 4, 0]

8 [G, D, 5, 0]

9 [L, R, 5, 0]

10 [S, R, 2, 0]

11 [P, D, 2, 0]

12 [H, , , ]

13 [ , , , ]

14 [ , , , ]

15 [ , , , ]

16 [ , , , ]

17 [ , , , ]

18 [ , , , ]

19 [ , , , ]

20 [ , , , M]

21 [A, T, , ]

22 [ , , , ]

23 [ , , , ]

24 [ , , , ]

25 [ , , , ]

26 [ , , , ]

27 [ , , , ]

28 [ , , , ]

29 [ , , , ]

30 [ , , , S]

31 [ , , , ]

32 [ , , , ]

33 [ , , , ]

34 [ , , , ]

35 [ , , , ]

36 [ , , , ]

37 [ , , , ]

38 [ , , , ]

39 [ , , , ]

40 [ , , , O]

41 [N, , , ]

42 [ , , , ]

43 [ , , , ]

44 [ , , , ]

45 [ , , , ]

46 [ , , , ]

47 [ , , , ]

48 [ , , , ]

49 [ , , , ]

50 [ , , , M]

51 [ , , , ]

52 [ , , , ]

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93 [ , , , ]

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98 [ , , , ]

99 [ , , , ]

Opcode : GD

Operand : 20

RAM IS OLDER THAN SHRIRAM

Opcode : LR

Operand : 26

[R, A, M, ]

Opcode : CR

Operand : 20

4

Opcode : BT

Operand : 06

IC = 6

Opcode : PD

Operand : 20

Opcode : H

Operand :

0 [G, D, 2, 0]

1 [L, R, 2, 6]

2 [C, R, 2, 0]

3 [B, T, 0, 6]

4 [G, D, 3, 0]

5 [P, D, 3, 0]

6 [P, D, 2, 0]

7 [H, , , ]

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18 [ , , , ]

19 [ , , , ]

20 [R, A, M, ]

21 [ , I, S, ]

22 [O, L, D, E]

23 [R, , T, H]

24 [A, N, , ]

25 [S, H, R, I]

26 [R, A, M, ]

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Process finished with exit code 0