

SAMPLE OUTPUT SCREENSHOTS

```

/home/pranith/javaProject/v5
pranith v2 sai v5 pranith v5
Note: Driver.java uses unchecked or unsafe operations.
Note: Recompile with -Xlint:unchecked for details.
pranith@tpadEmOS:~/javaProject/v5$ java Driver

-----JAVA MINI PROJECT-----

*Minimization of Boolean expression using Quine-Mccluskey(QM) Method*

This program takes inputs for Minterms and/or Don't cares and prints the minimised Boolean expression

APPLICATION:

Enter the number of variables:4
Enter the number of minterms you want to add:50
ExcessQuantityException: Number of Minterms/Don't cares exceeds permissible limits!

Enter the number of minterms you want to add:6
Enter the minterms (in numbers from 0 to 15 separated by spaces):20 0 2 7 15 2

Minterm/Don't Care entered exceeds bounds. Only 16 terms possible for 4 variables!      List: [20]
Please check the input and enter minterm 1 again:1

Minterm/Don't Care repeated!      List: [1, 0, 2, 7, 15, 2]
Please check the input and enter minterm 6 again:6

Do you want to enter Don't cares? (y/n):y
Enter the number of Don't Cares you want to add:14
ExcessQuantityException: Number of Minterms/Don't cares exceeds permissible limits!

Enter the number of Don't Cares you want to add:4
Enter the Don't cares (in numbers from 0 to 15 separated by spaces):7 3 18 10

Entered Don't care found in minterms!
Minterms List: [1, 0, 2, 7, 15, 6]      Don't Cares list: [7]
Please check the input and enter term 1 again:9

Minterm/Don't Care entered exceeds bounds. Only 16 terms possible for 4 variables!      List: [9, 3, 18]
Please check the input and enter term 3 again:13

The Minterms entered are: [1, 0, 2, 7, 15, 6]

The Don't cares entered are: [9, 3, 13, 10]

=====

The Grouping Stage:

TALLY GROUPS:
0:[0]
1:[1, 10]
2:[110, 1001, 11, 1010]
3:[111, 1101]
4:[1111]

=====

```

```

/home/pranith/javaProject/v5
pranith v2 sai v5 pranith v5

=====
PRIME IMPLICANTS:
_001
_010
_111
11_1
1_01
00__
0_1_

=====
PRIME IMPLICANTS COVERAGE CHART:
1      0      2      7      15      6
X
      X
      X      X
      X
X      X      X
      X      X      X

=====
ESSENTIAL PRIME IMPLICANTS:
00__
0_1_

=====
Columns which aren't covered by EPI's are:
REMAINING PRIME IMPLICANTS COVERAGE CHART:
1      0      2      7      15      6
      X
      X

=====
After removing row and column dominance:
Prime implicants that are required (Other than EPI's):
FINAL PRIME IMPLICANTS CHART
1      0      2      7      15      6
      X

```

```

/home/pranith/javaProject/v5
=====
PRIME IMPLICANTS COVERAGE CHART:
1      0      2      7      15      6
X
      X
      X      X
      X
X      X      X
      X      X      X
=====
ESSENTIAL PRIME IMPLICANTS:
00__
0_1_
=====
Columns which aren't covered by EPI's are:
REMAINING PRIME IMPLICANTS COVERAGE CHART:
1      0      2      7      15      6
      X
      X
=====
After removing row and column dominance:
Prime implicants that are required (Other than EPI's):
FINAL PRIME IMPLICANTS CHART
1      0      2      7      15      6
      X
=====
THE RESULT:
The Final Simplified Expression:
BCD + A'B' + A'C
-----END OF APPLICATION-----
pranith@tpadEmOS:~/javaProject/v5$
```