```
>> ~/Desktop/Folders/University of Windsor/Fall 2024/COMP-2650/Labs/Lab10/lab10 mandal5 $ vi main.c
>> ~/Desktop/Folders/University of Windsor/Fall 2024/COMP-2650/Labs/Lab10/lab10 mandal5 $ vi arithmetic.c
>> ~/Desktop/Folders/University of Windsor/Fall 2024/COMP-2650/Labs/Lab10/lab10 mandal5 $ vi arithmetic.h
>> ~/Desktop/Folders/University of Windsor/Fall 2024/COMP-2650/Labs/Lab10/lab10 mandal5 $ cc main.c arithmetic.c -o main
>> ~/Desktop/Folders/University of Windsor/Fall 2024/COMP-2650/Labs/Lab10/lab10_mandal5 $ ./main
Enter the command number:
        0) Exit
        1) Canonical SoP
        2) Canonical PoS
Choose: 2 PoS
Error: Invalid input. Please enter 0 or 1.
Enter the command number:
        0) Exit
        1) Canonical SoP
        2) Canonical PoS
Choose: 2
Output value for row# 0 of F1 output variable (0 or 1): 1
Output value for row# 1 of F1 output variable (0 or 1): 0error
Invalid input! Please enter 0 or 1.
Output value for row# 1 of F1 output variable (0 or 1): 1 error
Invalid input! Please enter 0 or 1.
Output value for row# 1 of F1 output variable (0 or 1): -2
Invalid input! Please enter 0 or 1.
Output value for row# 1 of F1 output variable (0 or 1): 0
Output value for row# 2 of F1 output variable (0 or 1): 0
Output value for row# 3 of F1 output variable (0 or 1): 0
Output value for row# 4 of F1 output variable (0 or 1): 1
Output value for row# 5 of F1 output variable (0 or 1): 1
Output value for row# 6 of F1 output variable (0 or 1): 0
Output value for row# 7 of F1 output variable (0 or 1): 0
Z, Y, X, : F
0, 0, 0, : 1
0, 0, 1, : 0
0, 1, 0, : 0
0, 1, 1, : 0
1, 0, 0, : 1
1, 0, 1, : 1
1, 1, 0, : 0
1, 1, 1, : 0
```

output variable F1 = $\prod M(1, 2, 3, 6, 7) = (Z+Y+X')(Z+Y'+X)(Z+Y'+X')(Z'+Y'+X)(Z'+Y'+X')$

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Enter the command number:
        0) Exit
       1) Canonical SoP
        2) Canonical PoS
Choose: 1
Output value for row# 0 of F1 output variable (0 or 1): 1
Output value for row# 1 of F1 output variable (0 or 1): 0
Output value for row# 2 of F1 output variable (0 or 1): 0
Output value for row# 3 of F1 output variable (0 or 1): 0
Output value for row# 4 of F1 output variable (0 or 1): 1
Output value for row# 5 of F1 output variable (0 or 1): 1
Output value for row# 6 of F1 output variable (0 or 1): 0
Output value for row# 7 of F1 output variable (0 or 1): 0
Z, Y, X, : F
0, 0, 0, :1
0, 0, 1, : 0
0, 1, 0, : 0
0, 1, 1, : 0
1, 0, 0, : 1
1, 0, 1, : 1
1, 1, 0, : 0
1, 1, 1, : 0
output variable F1 = \sum m(0, 4, 5) = Z'Y'X' + ZY'X' + ZY'X
Enter the command number:
       0) Exit
       1) Canonical SoP
       2) Canonical PoS
Choose: 0 exit
Error: Invalid input. Please enter 0 or 1.
Enter the command number:
       0) Exit
       1) Canonical SoP
       2) Canonical PoS
Choose: 0
Exiting...
>> ~/Desktop/Folders/University of Windsor/Fall 2024/COMP-2650/Labs/Lab10/lab10_mandal5 $
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