

Report – Assignment 2 COL216 (Tic Tac Toe)

1. First of all, we created 3 arrays of size 3 with initial value of {0, 0, 0}.
2. We use while loop by calling label 'while' again and again until we get the value of counter to 9 (take 9 input pairs)
3. After taking each input, we check whether it is valid or not. If not, then that player loses his/her chance and turn goes to the other player.
4. we create a label 'checker' to check whether there is any row or column or diagonal for which the sum is 3 (for player 1) or -3 (for player 2).
5. we call 'checker' after taking each pair of input, if we find the sum 3 then we print "Player 1 won" and exit the game, for sum -3, we print "Player 2 won" and exit is called.
6. If the counter hits 9 and we couldn't get sum 3 or -3, then "Match Tie" is printed and exit is called.
7. Before exiting, label "showarrayfinal" is called, which prints these three arrays one by one line by separating each element by <space> and each line by <\n>
8. there are separate labels for valid or invalid inputs which are called after each input.

TOTAL LABELS:

```
main
while
PoneAone
valid1
invalid1
endif1
endendif1
PoneAtwo
valid2
invalid2
endif2
endendif2
PoneAthree
valid3
invalid3
endif3
endendif3
PtwoAone
valid12
invalid12
endif12
endendif12
PtwoAtwo
valid22
invalid22
endif22
```

endendif22
PtwoAthree
valid32
invalid32
endif32
endendif32
enter
checker
binvalid1
binvalid2
showarrayfinal
final
tie
final1
final2
exit