Remarks _____ Submitted on _____

Returned on _____

Procedure N_QUEENS (n)

Description - Using Backtracking this procedure prints all possible of N-QUEEN by on board so that they are non-attacking.

Declaration - integer k, n, x(1:n)

```
k ← 1; x(k) ← 0 //starts with first row
                  and 0th column.
while k>0, do //Try all possible solutions
    x(k) ← x(k) + 1
    while x(k) ≤ n and NOT PLACE(k), do
        x(k) ← x(k) + 1 //Try one
                          column/position

    repeat
    if x(k) ≤ n, then
        if k = n, then
            print (x)
        else
            k ← k + 1
            x(k) ← 0
        endif
    else
        k ← k - 1
    endif
repeat
```

END N_QUEENS.

Complete for :

- Algorithm
- Flow Chart
- Programme Listing
- Results
- Comments