N-QUEENS PROBLEM

```
Algorithm Place(k, i)
{
      for j := 1 to k-1 do
      {
            if((x[j] = i) or (Abs(x[j] - i) = Abs(j - k))) then
                  return(false);
      }
      return(true);
}

Algorithm NQueen(k, n)
{
      for i := 1 to n do
      {
            if Place(k, i) then
            {
                  x[k] := i;
                  if(k = n) then
                        write(x[1 : n]);
                  else
                        NQueen(k+1, n);
            }
      }
}
```