*ET-575 Second Midterm Examination  Fall 2019*

Q1. Code the following prompt and value input and value editing in a Do While Loop to make sure you have either 5,7,9,or 11

Request an odd number between 5 and 11 inclusive.

Q2. Code just the nested loop the following diagram using row and col comparisons.

```
X * * * * * X
* X * * * X *
* * X * X * *
* * *  O * * *
* * X * X * *
* X * * * X *
X * * * * * X
```

Q3.  Create a function, named calcCircle that will pass a float value of radius that will output the Circumference and Area of a Circle.  The equation of the circumference of a circle is :
Circumference = 2 * radius * Pi  (Pi = 3.142758.
Area = Pi * radius ** 2  (radius squared).

Q4 .  Write the Loop Statements that will only display the numbers from 1 to 99 that contain a '7' in it.

Output:

7  17  27  37  47  57  67 70  71 72  73  74  75  76  77 78  79  87  97

Q5. Display the truth table for the following logical equation:

If ((( A > 5) || (B<0)) && (!((C%2) == 1))))

Determine whether it is TRUE or FALSE for the following values : A = 7, B = 2, C=7

Q6. Coding Question (you must code this problem and submit via Blackboard):

Using Nested Loops display the following exactly as it is shown below:

| | Columns | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Rows | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 2 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 3 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 |
| 4 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 |