

Question 8: Write a program that produces the following output. (25 Marks)

(a) Use nested *While* loops to produce the following pattern:

```

!!!!!!!!!!!!!!!!!!!!!!!!!!!!
\\!!!!!!!!!!!!!!!!!!!!!!!!!!//
\\\\\\!!!!!!!!!!!!!!!!!!!!!!//
\\\\\\\\\\!!!!!!!!!!!!!!!!!!//
\\\\\\\\\\\\\\!!!!!!!!!!!!//
\\\\\\\\\\\\\\\\\\!!!!!!//
\\\\\\\\\\\\\\\\\\\\\\!!!!//

```

(b) Write nested *for* loops to produce the following output.

```

***** /////////////// *****
***** //////////////\\ *****
***** //////////////\\ *****
*** //////////////\\ *****
** //////////////\\ *****
* //////////////\\ *****
\\\\\\\\\\\\\\\\\\\\

```

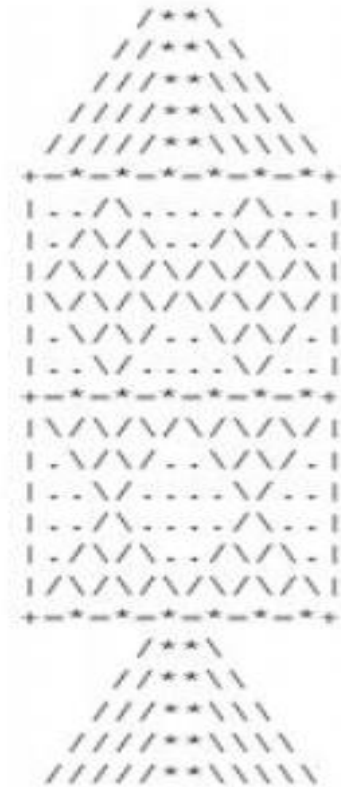
(c) Write nested *for* loops to produce the following output.

```

          1
        1 2 1
      1 2 3 2 1
    1 2 3 4 3 2 1
  1 2 3 4 5 4 3 2 1
1 2 3 4 5 6 5 4 3 2 1
1 2 3 4 5 6 7 6 5 4 3 2 1
1 2 3 4 5 6 7 8 7 6 5 4 3 2 1
1 2 3 4 5 6 7 8 9 8 7 6 5 4 3 2 1
1 2 3 4 5 6 7 8
1 2 3 4 5 6 7
1 2 3 4 5 6
1 2 3 4 5
1 2 3 4
1 2 3
1 2
1

```

(d) Write nested *for* loops to produce the following output.



(e) Write nested *for* loops to produce the following output.

