Exercise-2

1. Read a sequence of characters from the terminal until **q** is read. Output the largest character read, not including the **q**.

2. Write a program that displays the following pattern

1	2	3	4	5
2	4	6	8	10
3	6	9	12	15
4	8	12	16	20
5	10	15	20	25
6	12	18	24	30
7	14	21	28	35
8	16	24	32	40

3. Write a program that given r, a, and n, displays the first n terms of the corresponding geometric progression.

4. Print the sum of the reciprocals of the first 100 natural numbers.

5. **write a program to print the following patterns**

1
12
123
1234
12345

6. **Write a program to print the following patterns**

1
12
123
1234
12345
1234
123
12
1

7. **Program 3:Write a program to print the following patterns**

12345
1234
123

12

1

12

123

1234

12345

8. **Write a program to print the following patterns**

    *

    **

    ***

    ****

    *****

9. Write a program to print the following patterns

    *****
    ****
     ***
     **
      *

10. Write a program to print the following patterns

    *****
    ****
    ***
    **
    *

11. Write a program to print the following patterns

```
    *
   ***
  *****
 *******
*********
```

12. **Write a program to print the following patterns**

```
*********
 *******
 *****
 ***
 *
```

13. **Program 9: Write a program to print the following patterns**

```
*
***
*****
*******
*********
 *******
 *****
***
*
```

14. **Write a program to print the following patterns**

```
$ * * * $
* $   $ *
*   $   *
* $   $ *
$ * * * $
```

15. **Write a program to print the following patterns**

```
* * * * * *
          *
        *
      *
    *
* * * * * *
```

16. **Write a program to print the following patterns**

```
  *   *   *   *   *
*               *
*               *
*               *
  *   *   *   *   *
```

17. **Write a program to print the following patterns**

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