1. Write code for prime numbers
2. Write code for throwing random numbers to users and ask them to enter their product, show them if its correct or not
3. Write a program for printing the squares of even numbers/odd numbers from a range of 100- 200
4. You are given a dataset of email addresses. Your task is to print a list containing only valid email addresses in lexicographical order.

* Valid email addresses must follow these rules:
* It must have the username@websitename.extension format type.
* The username can only contain letters, digits, dashes and underscores .
* The website name can only have letters and digits .
* The extension can only contain letters .
* The maximum length of the extension is 3

1. What are Generators in python, explain the purpose and usage of generators with respect to machine learning?
2. Explain the purpose of the “if \_\_name\_\_=\_\_main\_\_: in python scripts
3. Explain the differences between list and tuples.
4. Why do we use lambda functions in python, purpose of these functions in machine learning?
5. What is list comprehension, and how can it be used in machine learning?
6. Name some immutable datatypes in python?
7. What are the different data structures in pandas?
8. What is the diffence between df.loc(), df.iloc()?
9. What is virtual environment , what is the purpose of Virtual environments in real time ML project.
10. Explain the purpose of pickle module in python and its relevance to machine learning.