***Flight Price Prediction using sagemaker***

* 1. Sagemaker :- Amazone sagemaker is a fully managed machine learning service. with sagemaker , data scientist and developers can quickly and confidently build and train, deploy ML Models into a production-ready hosted environment. It provides a UI Experience for running ml workflows that makes Sagemaker ML tools available across multiple integrated development environments(IDEs).
* Advantages:-
  + It is fully managed service
  + it provides wide range of libraries for ML workflows
  + it provide wide range of algorithms for various problems
    - Regression
    - classification
    - object detection
    - etc
  + One-click Deployment
  + it integrate with other AWS services
  + It provides notebooks and IDE for development
    - Classic Jupiter
    - Jupiter lab
    - Sagemaker Studio
  + Detailed documentation
  + It has huge community and online support.
* AWS Sagemaker Services:-
  + IAM:- It stands for Identity & access management.
    - The AWS IAM is used for managing our account in AWS though which we can create multiple users , groups and allocate the AWS resources separately so that any misuse of our account is not able to do by users and groups
    - Sagemaker IAM provide us 3 level security:-
      * IAM GROUP
      * IAM USER
      * IAM Role
  + EC2:- it stands for elastic cloud computer. it provide us cloud based computer with having the configuration that we need to get. like we want a system having 16 rams, with any Operating system and some storage then we can get it on EC2.
  + S3:- It stands for simple storage service. In this S3 bucket we store our large or any size of files we can store these files here.
* SDK:- A Software development kit is a set of platform-specific building tools for developers. you require components like debuggers, compilers, and libraries to create code that runs on a specific platform, operating system or programming language . SDK’s put everything you need to develop and run software in one place. Additionally, they contain resources like documentation , tutorials, and guides as well as API and frameworks for faster application development.
  + Advantages:-
    - Efficient development
    - Reduce time complexity
    - Seamless Integration
    - Reduce Costs
  + AWS provide a separate SKD for Python specially called BOTO3 .
* Data cleaning & Github:-
  + Read about:- Dictionary comprehension and Dictionary unpacking.