**DOCKER**

**Steps on how to run a code using Docker**

Step 1:

Create a java / python file, write your code, and save it under a folder.

JAVA FILE:

class Fibonacci

{

    public static void main(String[] args)

    {

        int a,b,c;

        a=0;

        b=1;

        int n = 10;

        for(int i = 0 ; i<n;i++)

        {

            System.out.print(a + ",");

            c=a+b;

            a=b;

            b=c;

        }

    }

}

PYTHON FILE:

print("Hello world")

Step 2:

Download Docker.exe, install docker and sign up.

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Step 3:

Install necessary extensions in your visual studio to run a docker file.

Step 4:

Create a docker file named “Dockerfile” inside the same folder as your python/java file. A screenshot of a computer

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Step 5:

If your code is python enter the following code in the docker file:

FROM python:latest

WORKDIR /app

COPY . .

CMD ["python", "name of your python file .py"]

If your code is java enter the following code in the docker file :

FROM openjdk:latest

WORKDIR /app

COPY . .

RUN javac Fibonacci.java

CMD ["java", "Fibonacci"]

Step 6: Save the code, and type in the following commands in the terminal step by step

1. Docker login: command allows users to authenticate with a Docker registry to access and manage container images.

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1. Docker Build.: command is used to build a Docker image from a Dockerfile and context.

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1. Docker Build -t demo.: demo stands for the name of the image; command is used to build a docker image with the name demo.

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1. Docker images: displays the list of images.

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1. Docker run nameofyourimage: Command will run the docker file containing the particular java or python code.

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Step 7: Now you have completed running a java / python code in docker, now if you need to remove a container you can use the command: docker rm containerID.

Additional commands:

To list all the containers: docker ps -a