

Global-tech incorporation is leading Biotech & Medical distribution company, has decided to deploy all the data to remote repository and Automate the data as per the requirement.

1. Write the python program of Simple calculator and run python scripting as well and attach the screenshots

Google Colab link

https://colab.research.google.com/drive/1VAMYSOnABfWfUgvZ4pZ_dg6EBp7vnG7E?usp=sharing

```
#Simple Calculator
#Addition
def add(x, y):
    return x + y
#Subtraction
def subtract(x, y):
    return x - y
#Multiplication
def multiply(x, y):
    return x * y
#Division
def divide(x, y):
    return x / y
print("Select operation.")
print("1.Add")
print("2.Subtract")
print("3.Multiply")
print("4.Divide")

while True:
    choice = input("Enter choice your choice from the above option (1/2/3/4): ")

    # check if choice is one of the four options
    if choice in ('1', '2', '3', '4'):
        num1 = float(input("Enter first number: "))
        num2 = float(input("Enter second number: "))

        if choice == '1':
            print(num1, "+", num2, "=", add(num1, num2))
        elif choice == '2':
            print(num1, "-", num2, "=", subtract(num1, num2))
        elif choice == '3':
            print(num1, "*", num2, "=", multiply(num1, num2))
        elif choice == '4':
            print(num1, "/", num2, "=", divide(num1, num2))
```

```

next_calculation = input("Let's do next calculation? (yes/no): ")
if next_calculation == "no":
    break

```

else:

```
print("Invalid Input")
```

```

SimpleCal - Notepad
File Edit Format View Help
#simple calculator

#addition
def add(x, y):
    return x + y
#subtraction
def subtract(x, y):
    return x - y
#multiplication
def multiply(x, y):
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        if next_calculation == "no":
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    else:
        print("Invalid Input")

```

```

Administrator Command Prompt - SimpleCal.py
Microsoft Windows [Version 10.0.19041.1348]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Administrator>cd C:\Users\Administrator\Desktop\Python
C:\Users\Administrator\Desktop\Python>SimpleCal.py
Select operation.
1.Add
2.Subtract
3.Multiply
4.Divide
Enter choice from the above option (1/2/3/4): 1
Enter first number: 65
Enter second number: 4
65.0 + 4.0 = 69.0
Let's do next calculation? (yes/no): yes
Enter choice from the above option (1/2/3/4): 2
Enter first number: 41
Enter second number: 1
41.0 - 1.0 = 40.0
Let's do next calculation? (yes/no): yes
Enter choice from the above option (1/2/3/4): 3
Enter first number: 6
Enter second number: 10
6.0 * 10.0 = 60.0
Let's do next calculation? (yes/no):

```

2. Write a python program to find factorial of a number and do the scripting with screenshots

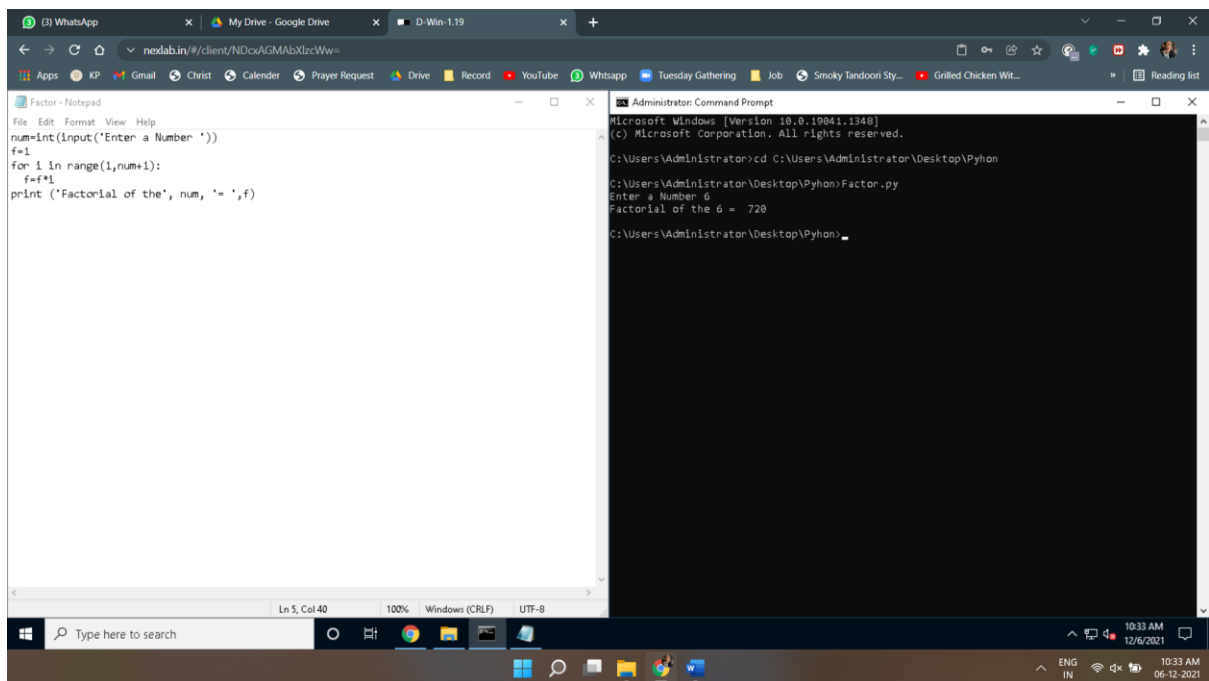
```
num=int(input('Enter a Number '))
```

```
f=1
```

```
for i in range(1,num+1):
```

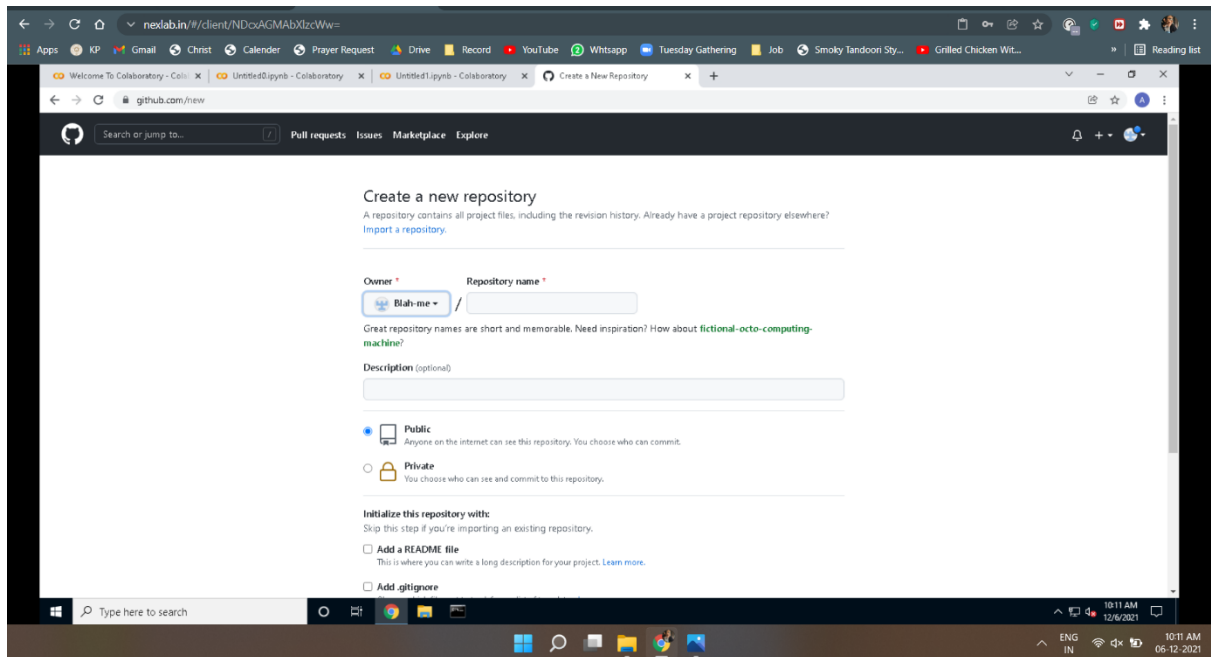
```
    f=f*i
```

```
print ('Factorial of the', num, '= ',f)
```

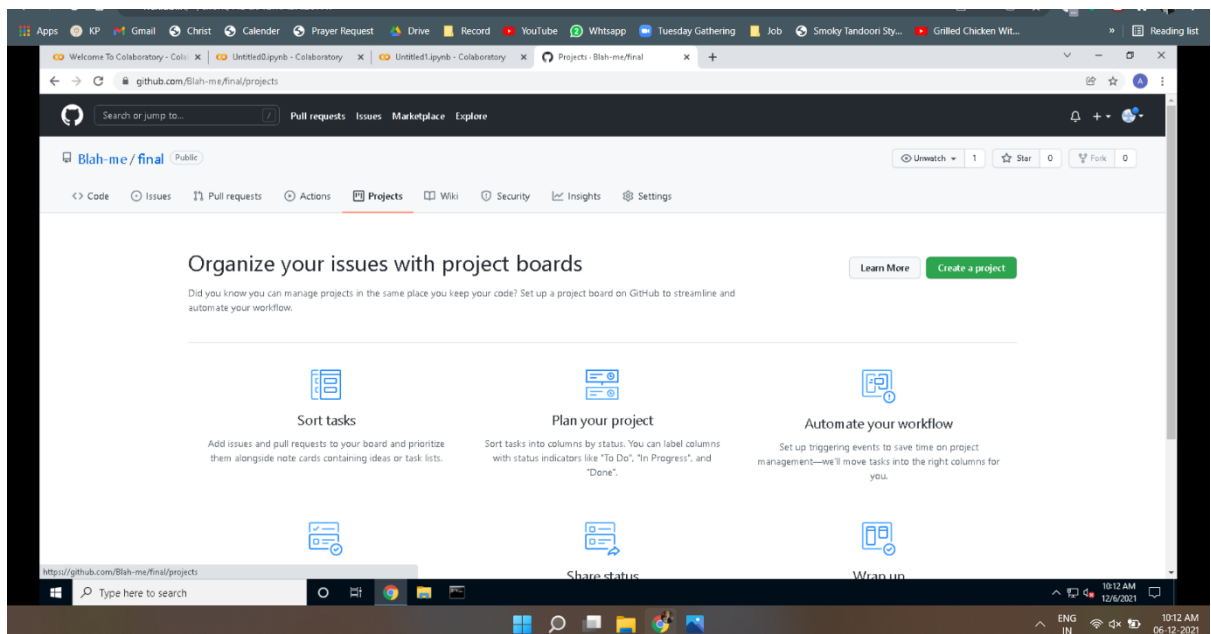


3. Create a repository , Create New Project and create columns and explain how it will work with screenshots

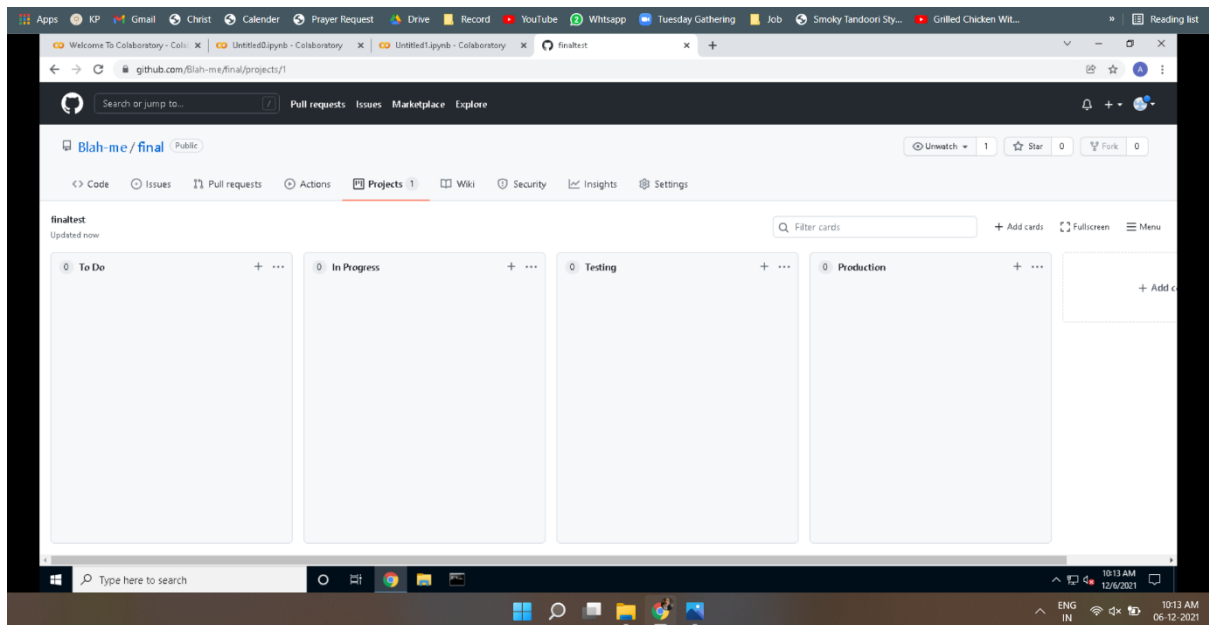
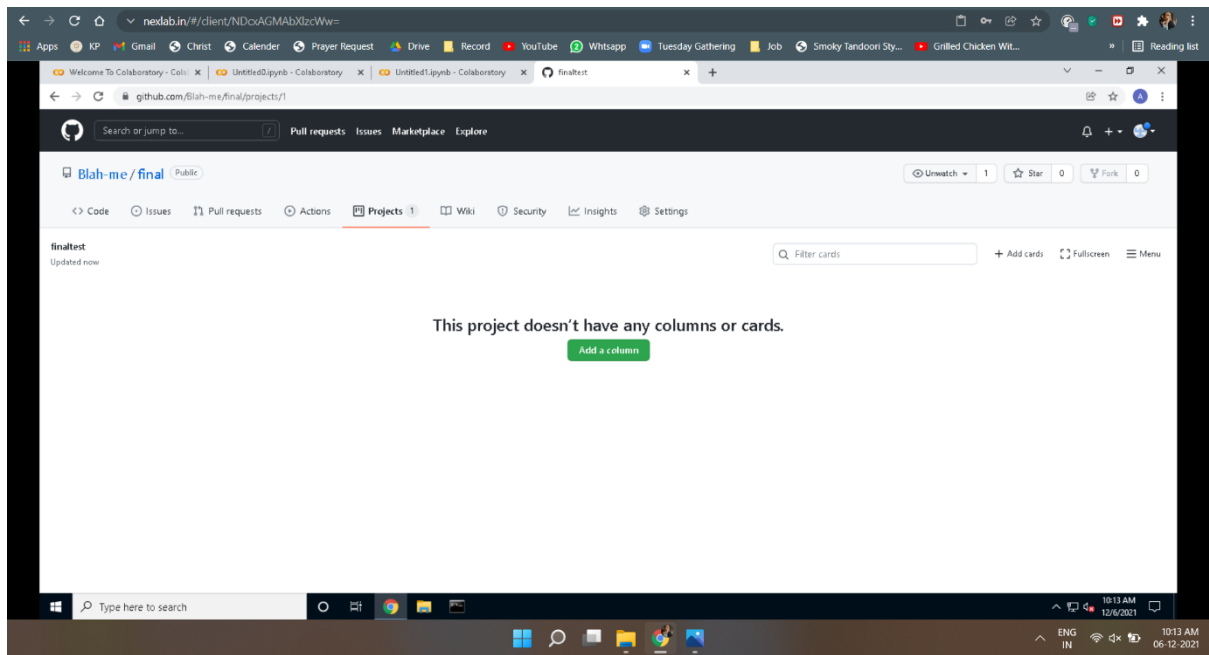
- login in or create a github account
- Create a new repository, give a unique name and select the required settings and click create



- 3. Once a repository is created click on create a new project and give a name

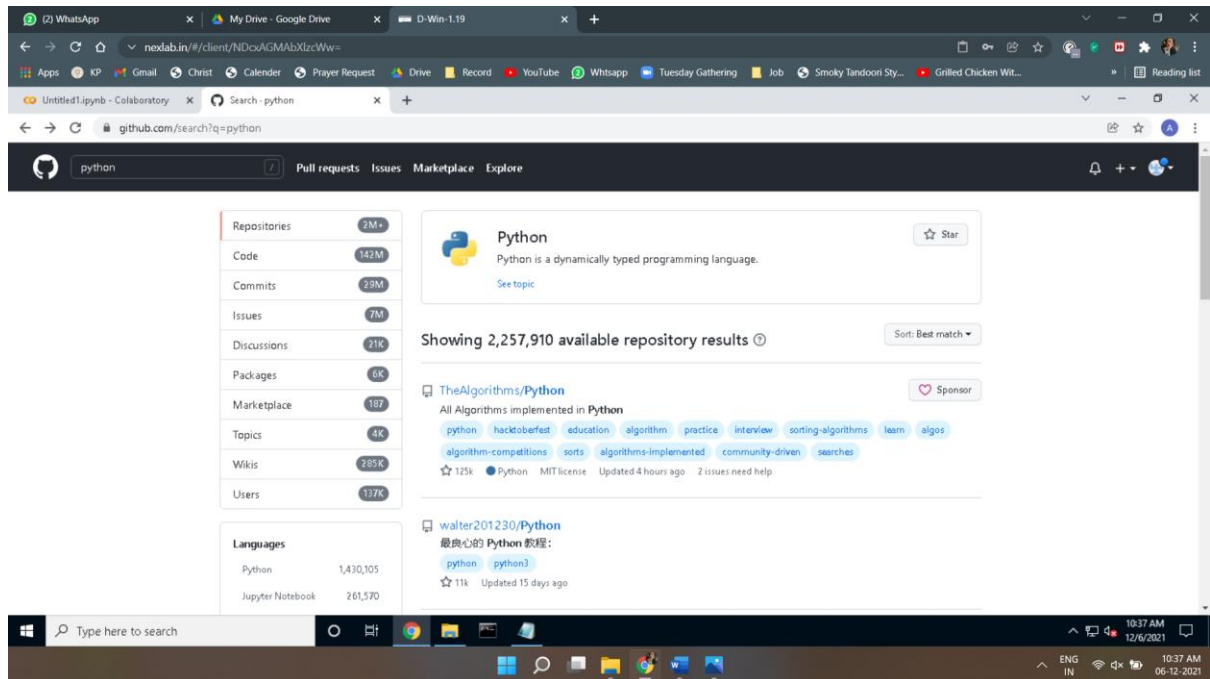


- Create columns according to the need.

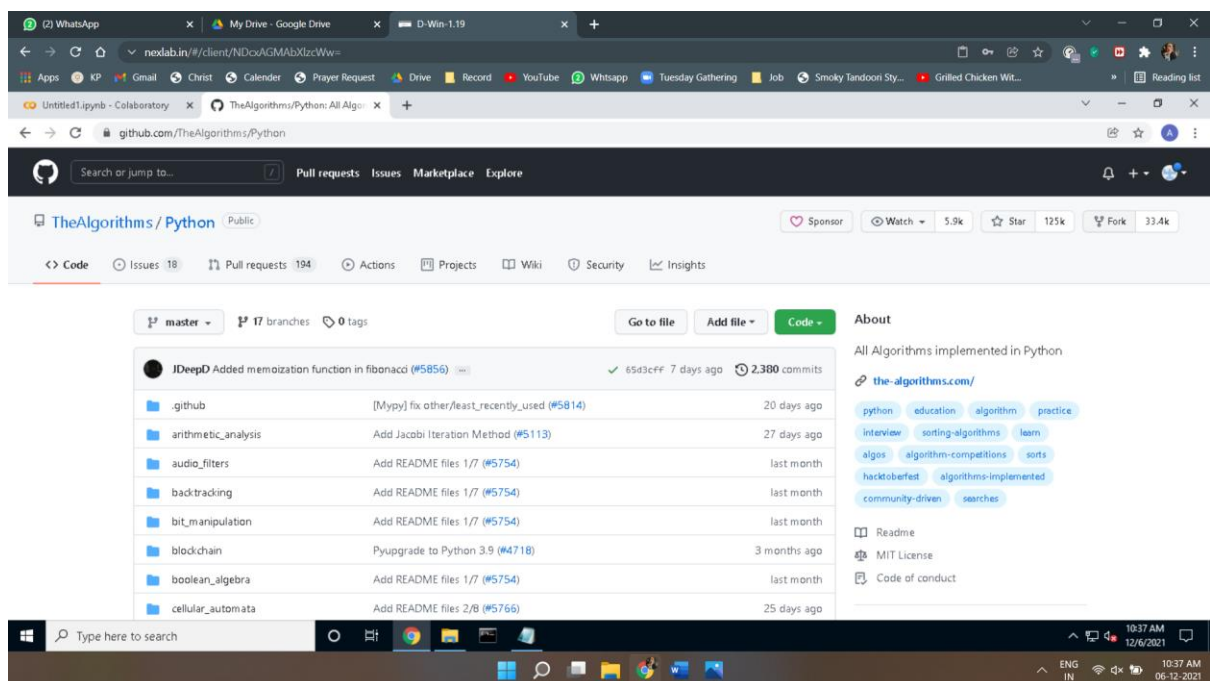


4. Create a project using Jenkins and do automation by executing the 10 windows commands with screenshots

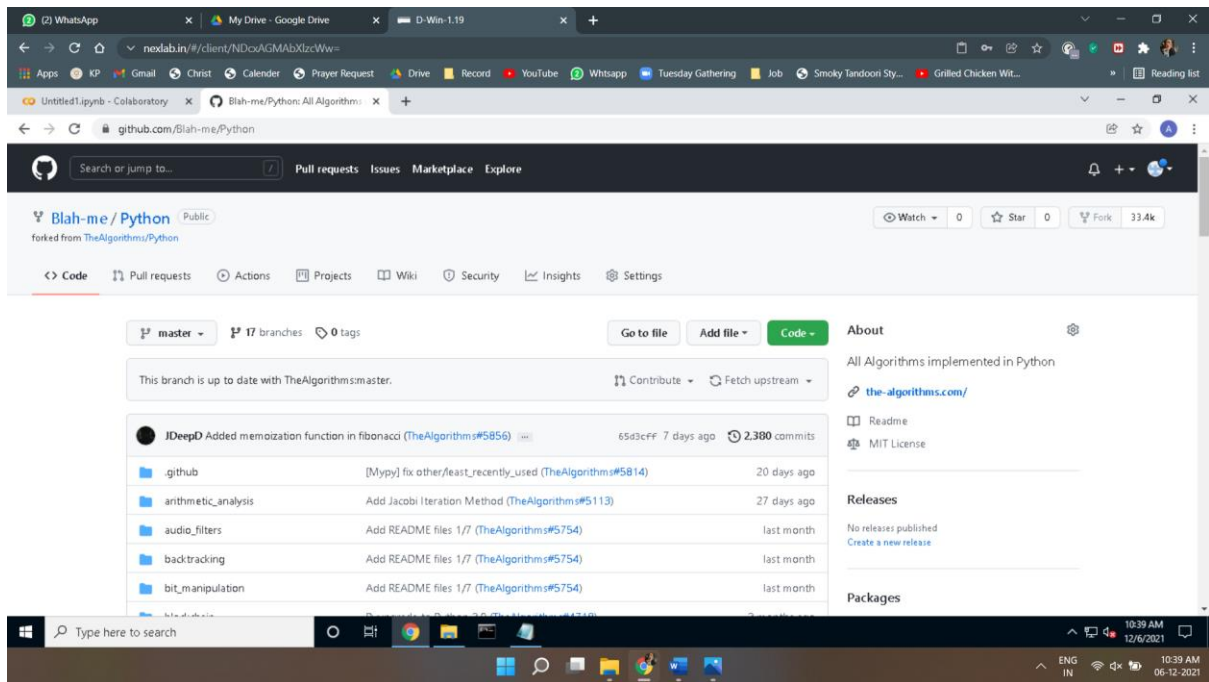
- Search for any project in search bar



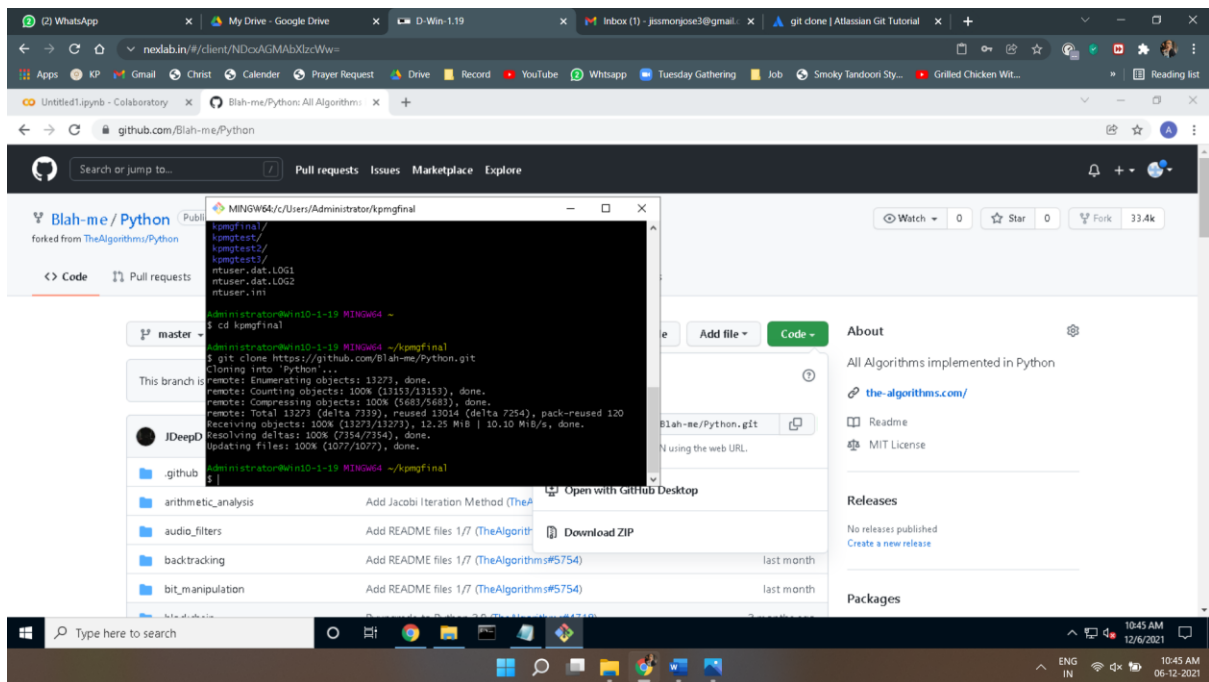
- Click on fork option from right side corner



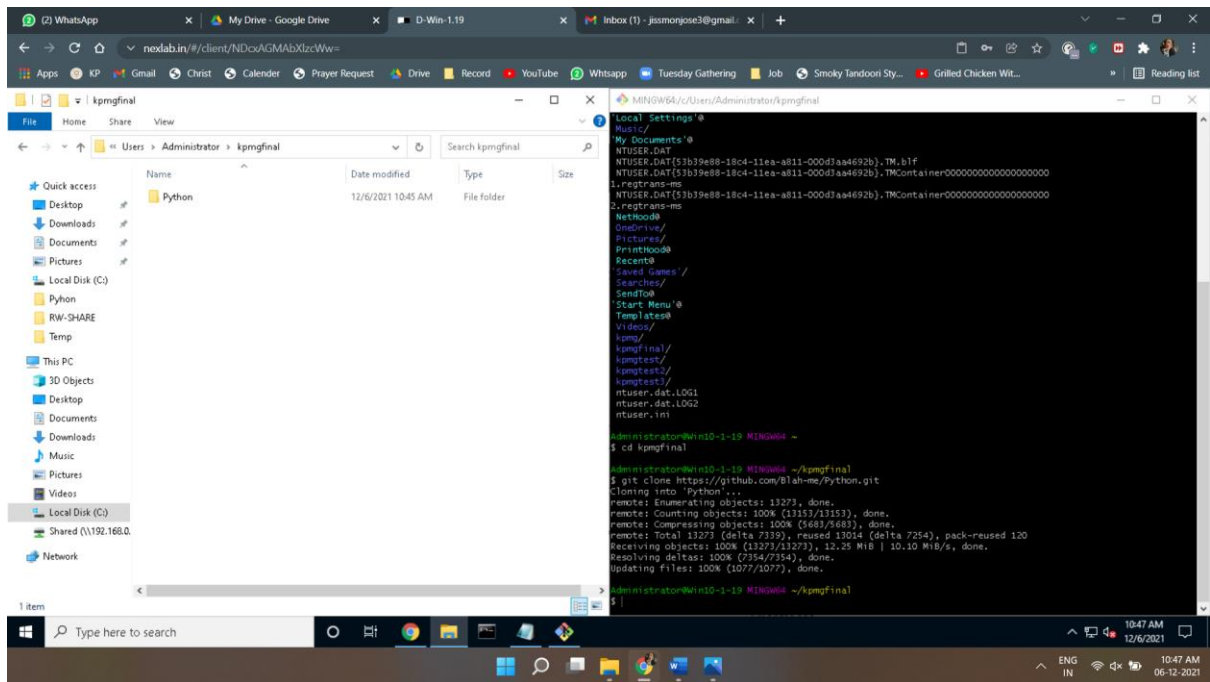
- Once we Fork the project the project comes in our name.



- Copy the code click of the forked project and past it in bash

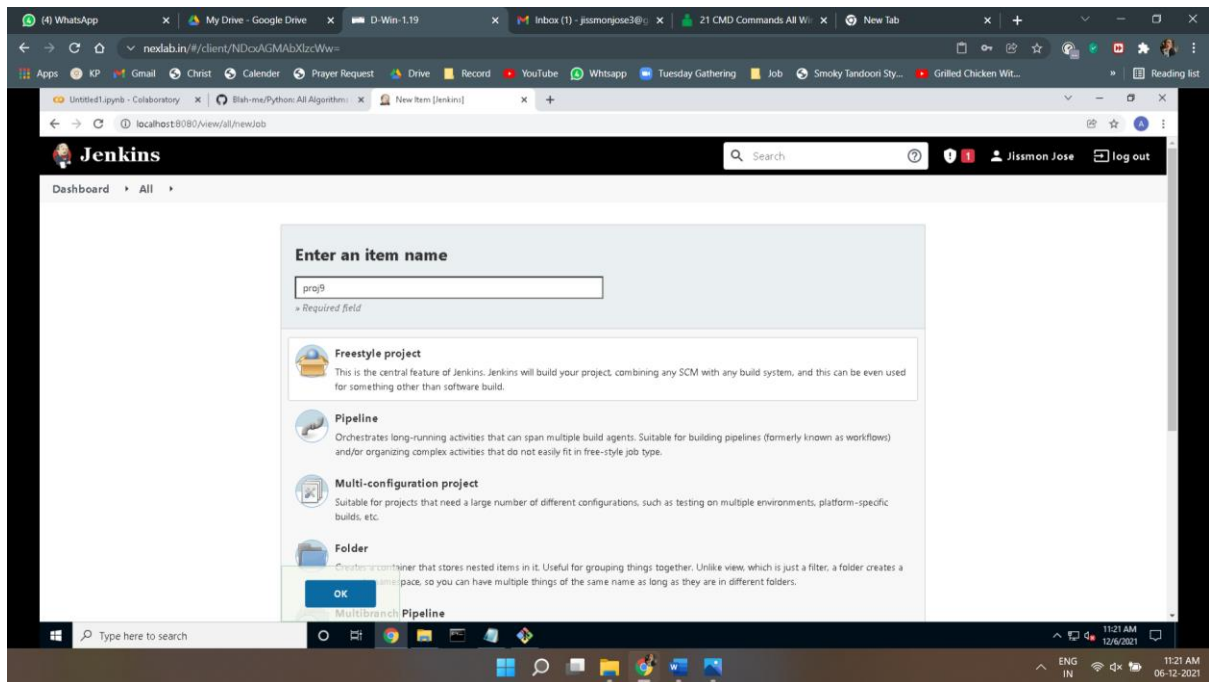


- The cloned file can be found in the created folder.

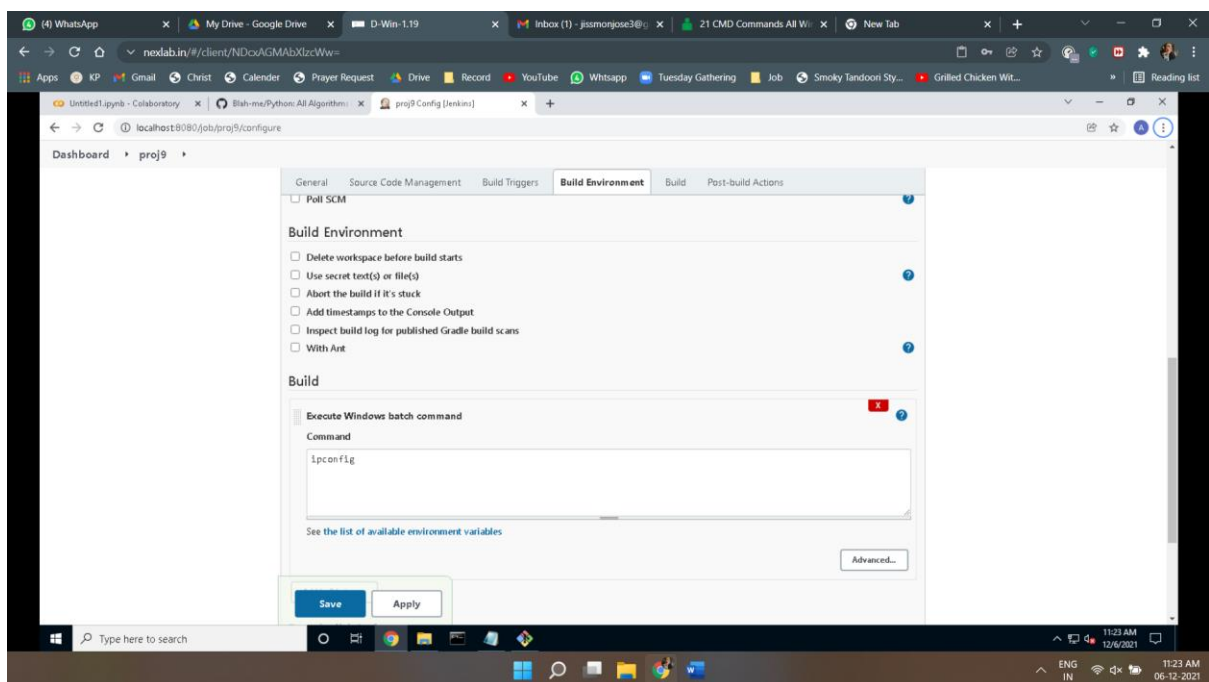


5.Create a project using Jenkins and do automation by executing the 10 windows commands with screenshots

- Login in to Jenkins
- Click on new item from dashboard.
- Enter a name and select Freestyle project



- Give the command and save changes



- Repeat the steps for 10 windows commands

Dashboard [jenkins]

Dashboard

People

Build History

Manage Jenkins

My Views

Lockable Resources

New View

Build Queue

No builds in the queue.

Build Executor Status

1 Idle

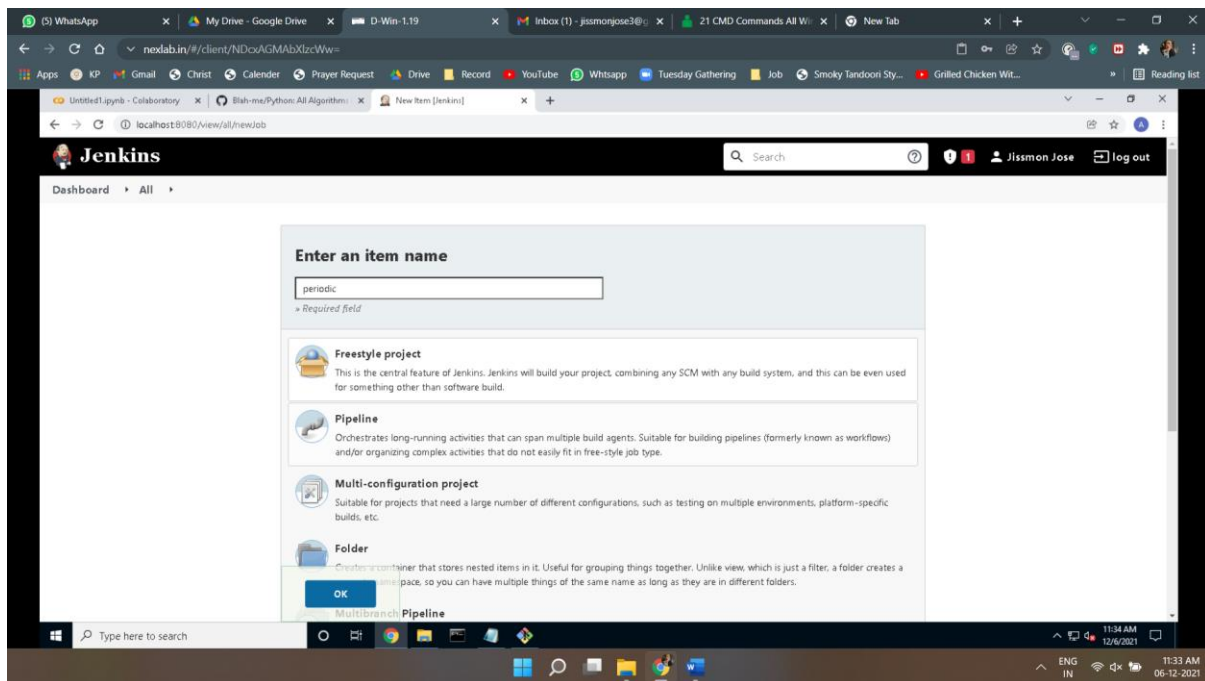
2 Idle

All	W	Name	Last Success	Last Failure	Last Duration
✓	⚙	assoc	37 sec - #19	N/A	0.31 sec
✓	⚙	chldsk	37 sec - #18	14 min - #5	0.49 sec
✓	⚙	ipconfig	36 sec - #24	N/A	0.79 sec
✓	⚙	netstat	36 sec - #14	N/A	9.9 sec
✓	⚙	ping	35 sec - #23	21 min - #2	11 sec
✓	⚙	proj10	26 sec - #5	N/A	0.23 sec
✓	⚙	proj11	37 sec - #4	N/A	14 sec
✓	⚙	proj7	26 sec - #11	2 min 28 sec - #9	15 sec
...	⚙	proj9	N/A	N/A	N/A
✓	⚙	project8	24 sec - #12	4 min 36 sec - #8	0.27 sec
...	⚙	systeminfo	N/A	N/A	N/A

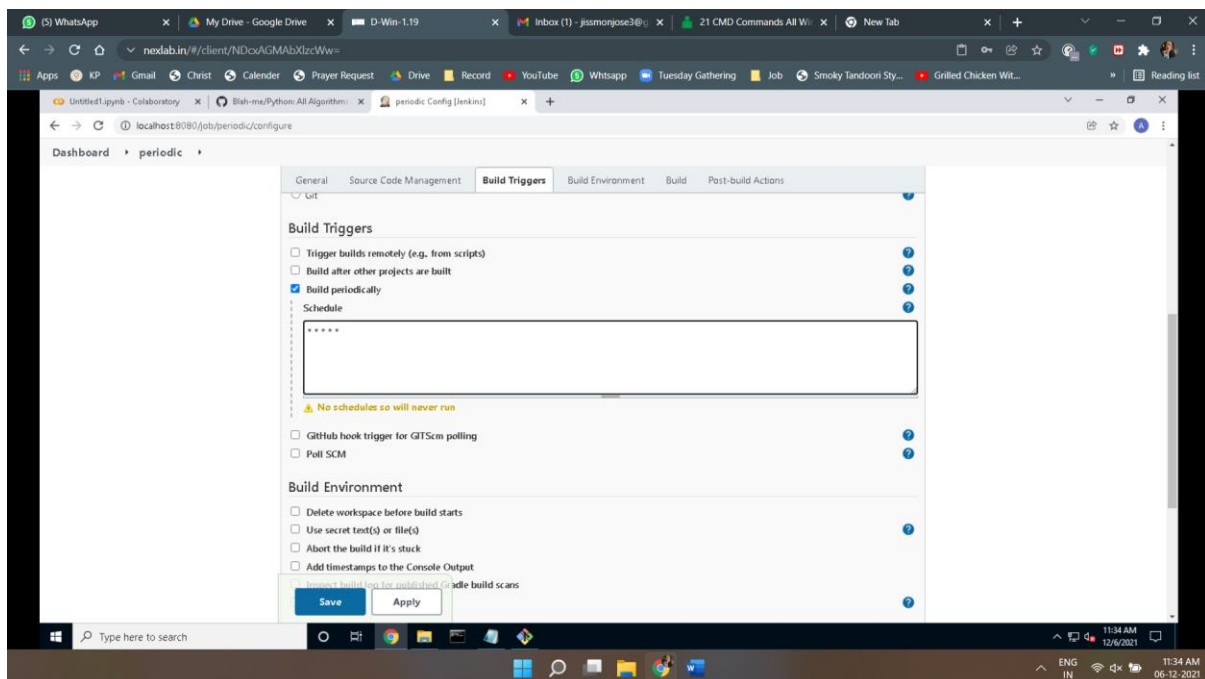
11:31 AM
12/6/2021

6. Create Periodical automation and explain

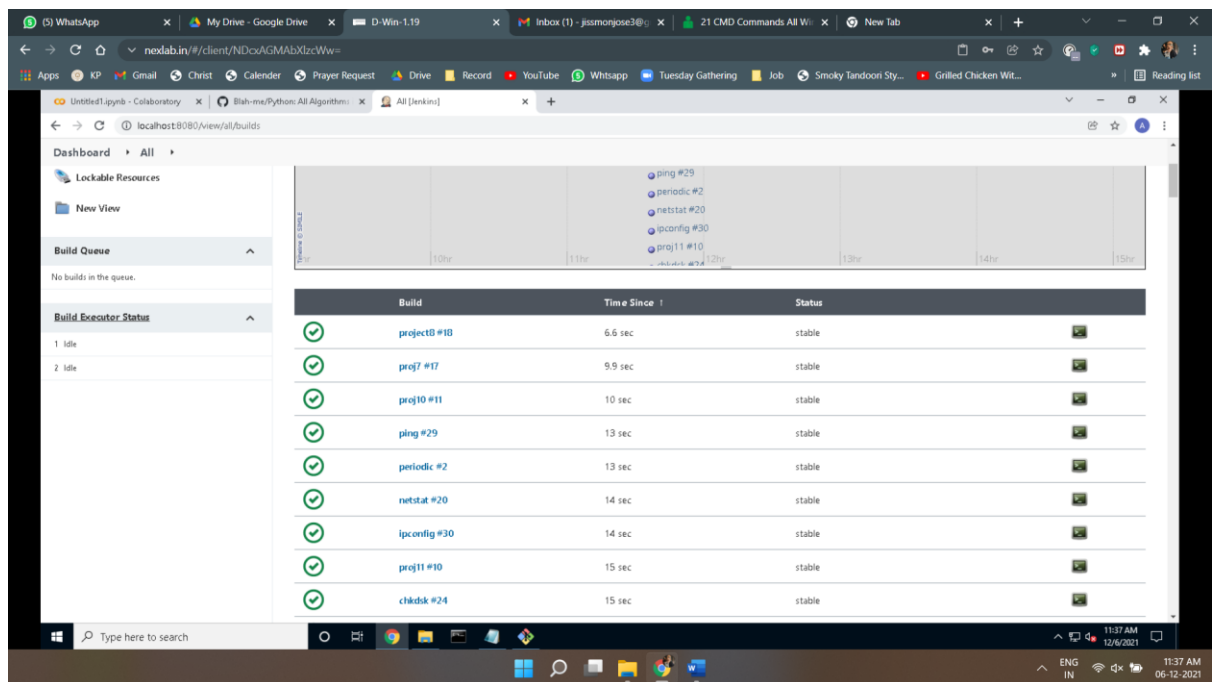
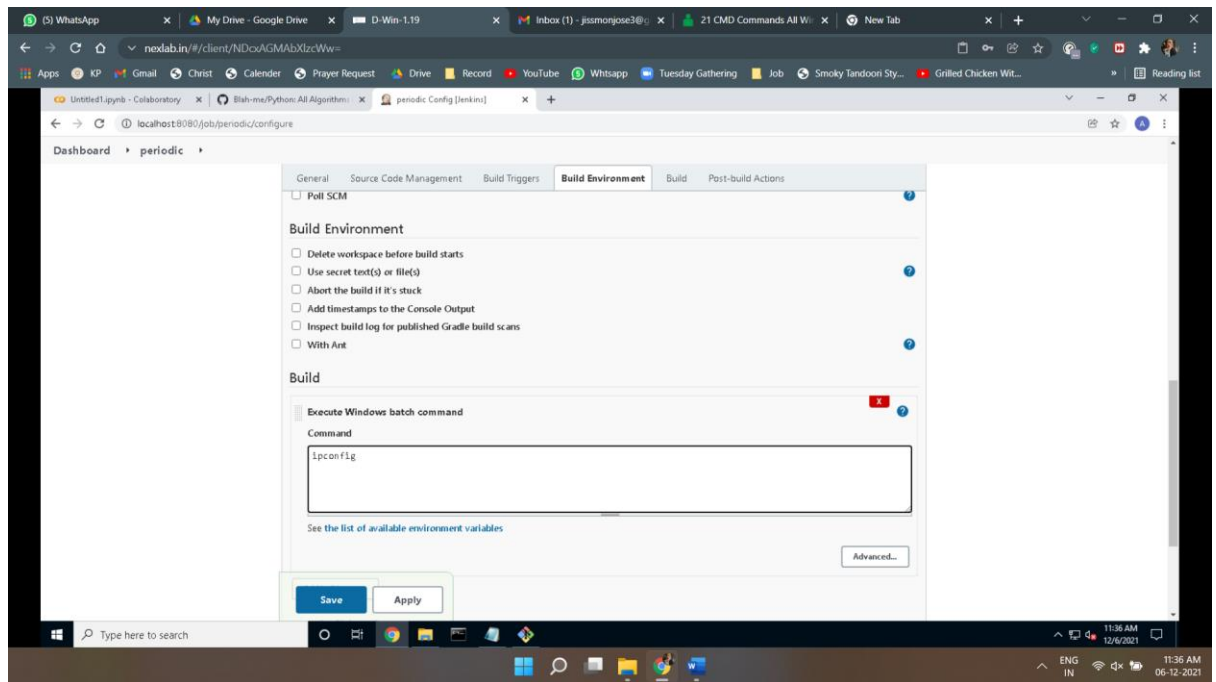
- Create a new item from dashboard
- Enter a name and select freestyle and click ok



- After giving description select Build Periodically from Build Trigger
- And give * * * * *

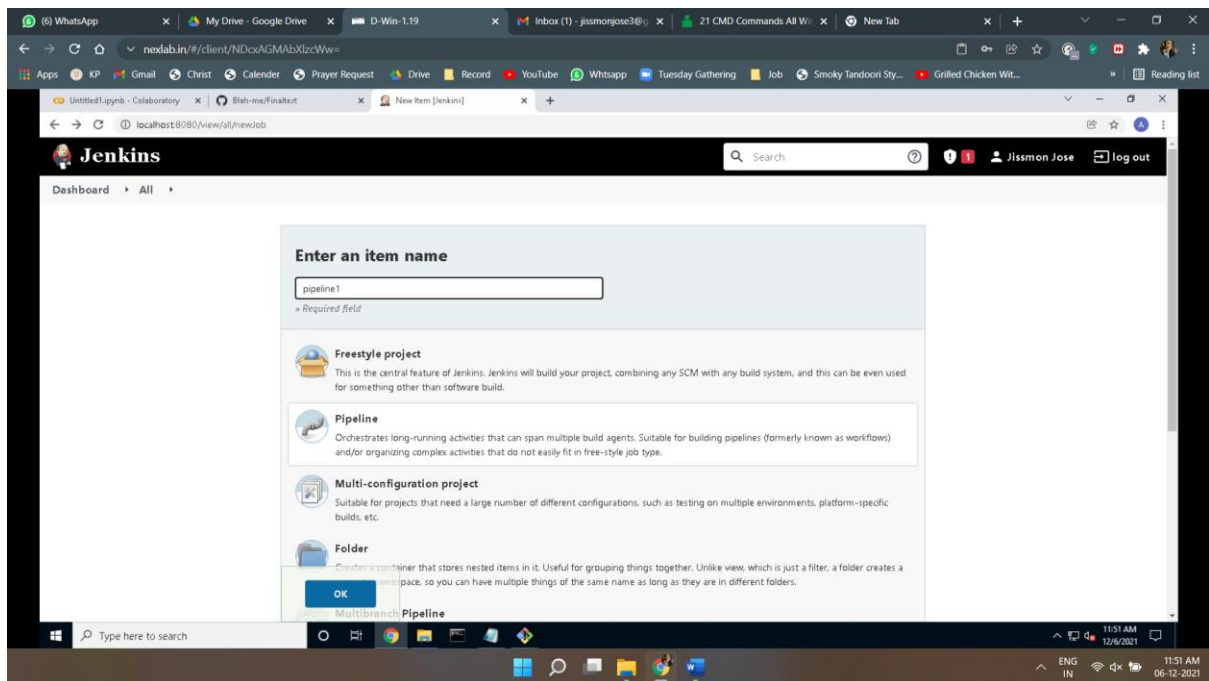


- Select Windows command from build options and give a command and save.

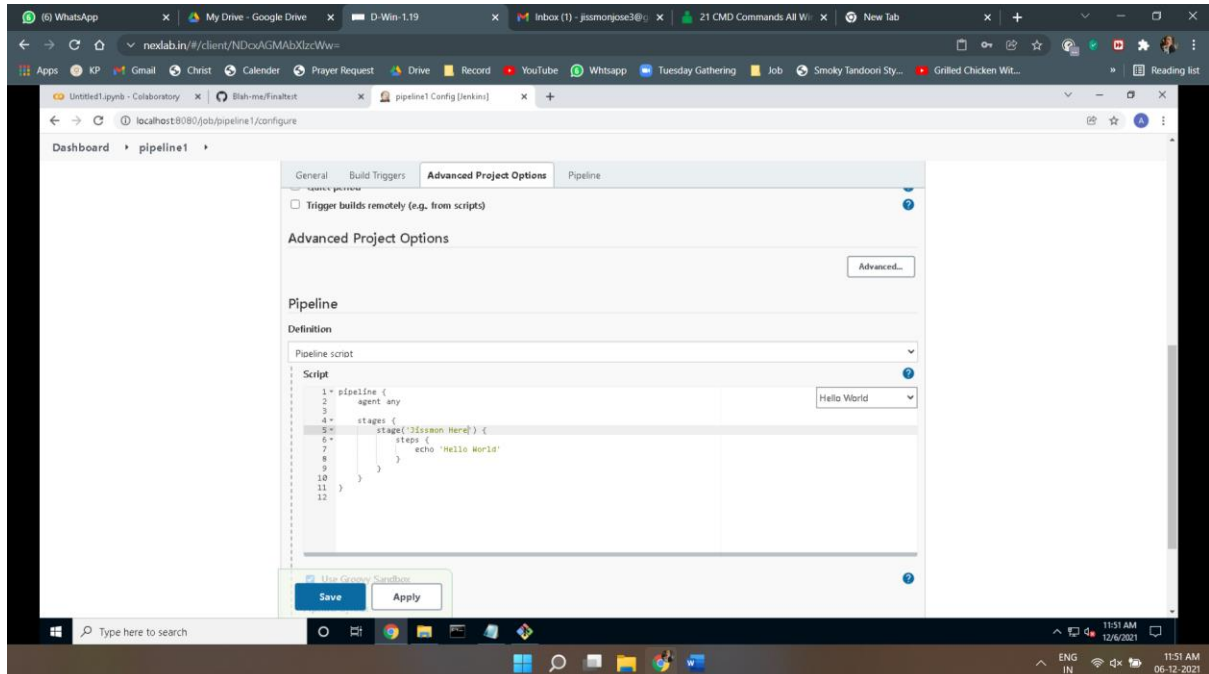


7. How to create pipeline and explain with screenshots

- Create a new item from dashboard
- Give a name and select pipeline option and click save



- Select Hello World from Pipeline script and make changes if needed and click on save.



- Click on Build now to see the results if periodic option is selected it will automatically execute the program

Browser tabs: (6) WhatsApp, My Drive - Google Drive, D-Win-1.19, Inbox (1) - jissonjose3@i..., 21 CMD Commands All Wi..., New Tab

Address bar: localhost:8080/job/pipeline1/

Dashboard > pipeline1 > Back to Dashboard

Left sidebar:

- Status
- Changes
- Build Now
- Configure
- Delete Pipeline
- Full Stage View
- Rename
- Pipeline Syntax
- Build History

Build History: Filter builds... trend ^

Builds:

- Dec 6, 2021 11:53 AM
- Dec 6, 2021 11:53 AM

Atom feed for all Atom feed for failures

Pipeline pipeline1

Recent Changes

Stage View

Average stage times:
(Average full run time: ~ 1s)

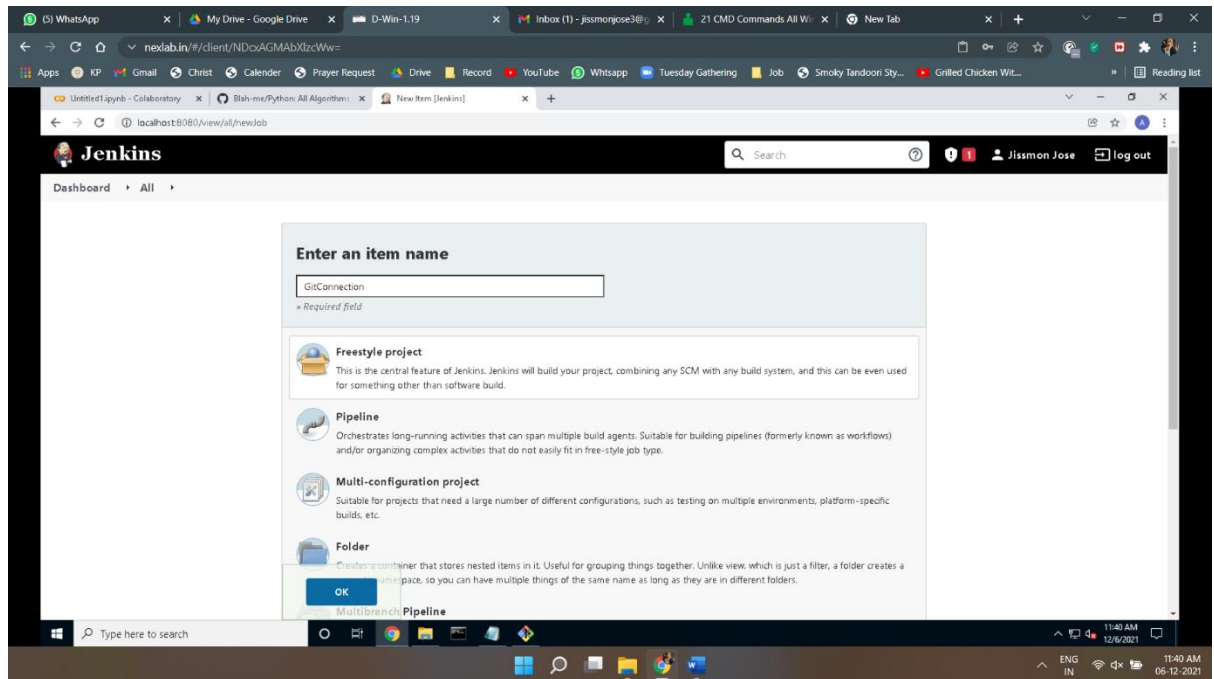
Stage	Time	Changes
Dec 06 11:53	148ms	No Changes
Dec 06 11:53	156ms	No Changes
Dec 06 11:53	141ms	No Changes

Permalinks

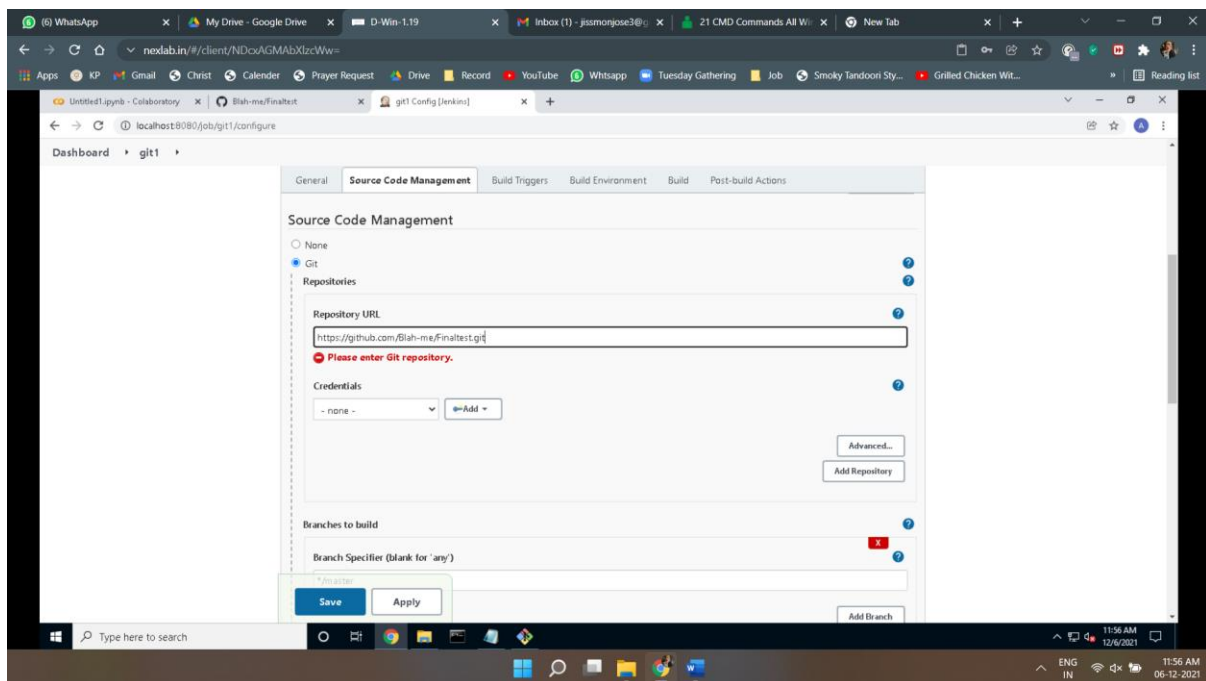
Footer: 11:53 AM 12/6/2021 ENG IN 06-12-2021

8. Explain how git can connect with Jenkins and attach the screenshots

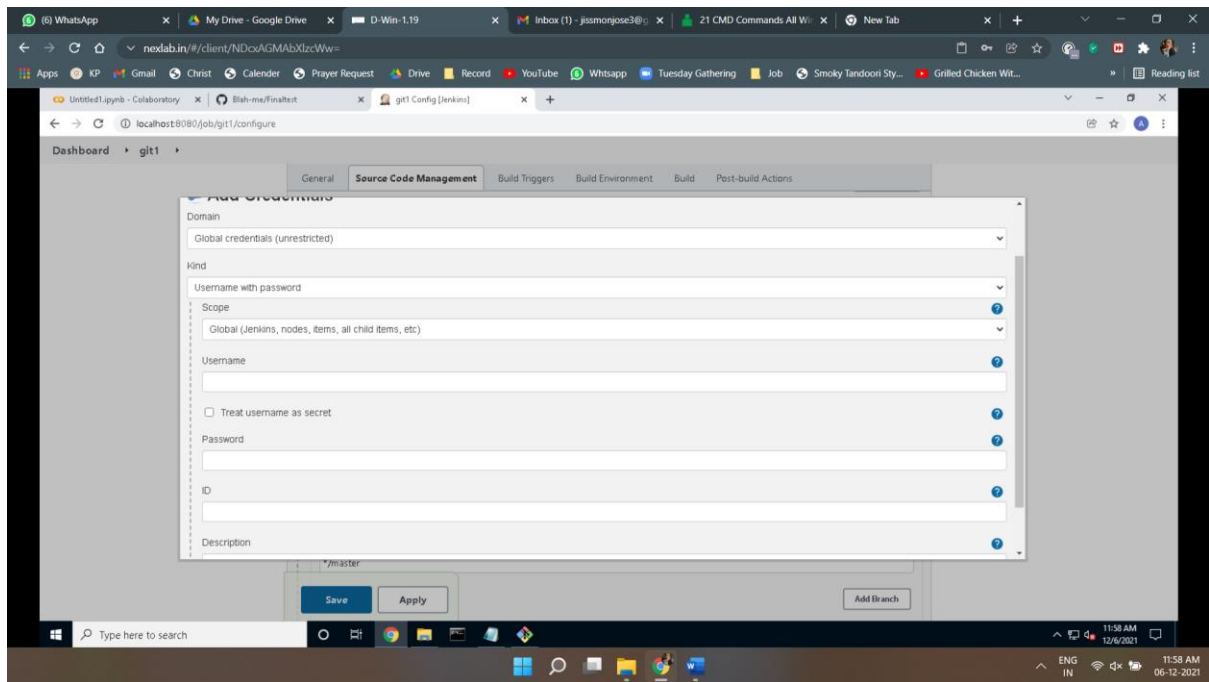
- Create a new item and give a name and select freestyle and save it



- From source management select Git and give the url of the git hub project.



- Select Jenkins and give the required details in the new window and save



- Once it's saved Click on build option and we will get a windows file path
- Copy past the path and paste it in the cmd