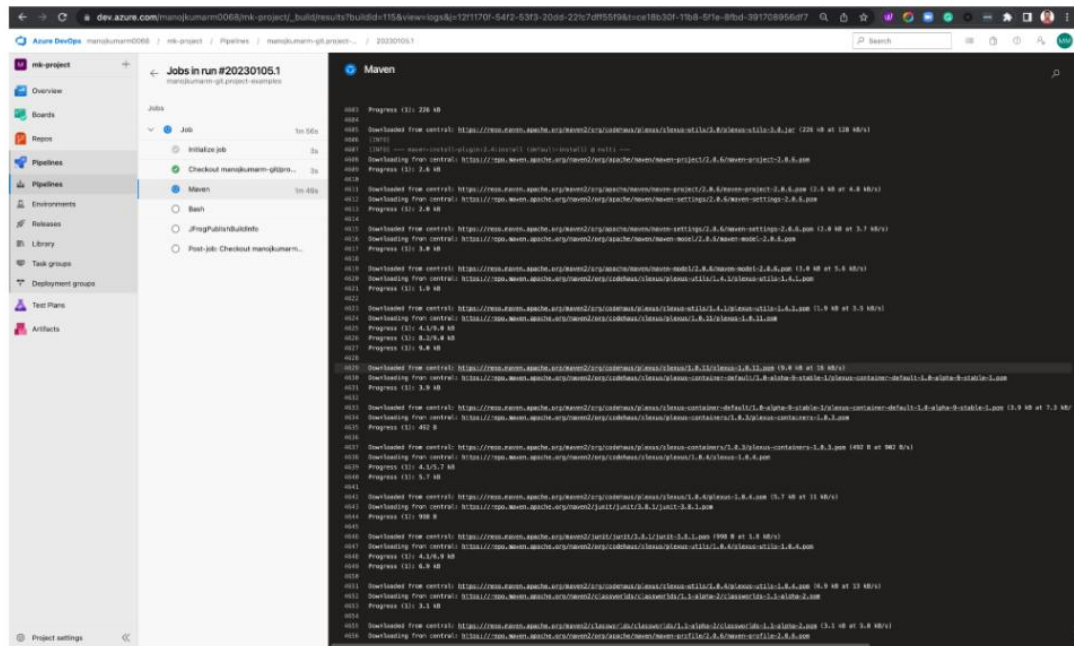


## OUTPUT

### EX NO:1 Create Maven Build Pipeline in Azure



### EXP 2: Run Regression Tests using Maven Build Pipeline in Azure

```
PS C:\Users\User> [INFO] -----
>> [INFO] Building junit-getting-started 0.0.1-SNAPSHOT
>> [INFO]
>> [INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ junit-getting-started ---
>> [WARNING] Using platform encoding (Cp1252 actually) to copy filtered resources, i.e. build is platform dependent!
>> [INFO] Copying 0 resource
>> [INFO]
>> [INFO] --- maven-compiler-plugin:3.1:compile (default-compile) @ junit-getting-started ---
>> [INFO] Changes detected - recompiling the module!
>> [WARNING] File encoding has not been set, using platform encoding Cp1252, i.e. build is platform dependent!
>> [INFO] Compiling 1 source file to E:\Git_Work\junit-developers-guide\junit-getting-started\target\classes
>> [INFO]
>> [INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @ junit-getting-started ---
>> [WARNING] Using platform encoding (Cp1252 actually) to copy filtered resources, i.e. build is platform dependent!
>> [INFO] Copying 0 resource
>> [INFO]
>> [INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ junit-getting-started ---
>> [INFO] Changes detected - recompiling the module!
>> [WARNING] File encoding has not been set, using platform encoding Cp1252, i.e. build is platform dependent!
>> [INFO] Compiling 1 source file to E:\Git_Work\junit-developers-guide\junit-getting-started\target\test-classes
>> [INFO]
>> [INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ junit-getting-started ---
>> [INFO] Surefire report directory: E:\Git_Work\junit-developers-guide\junit-getting-started\target\surefire-reports
>>
>> -----
>> T E S T S
>> -----
>> Running com.developersguide.junit.CalculatorTest
>> Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.069 sec
>> Results :
>> Tests run: 1, Failures: 0, Errors: 0, Skipped: 0
>> [INFO]
>> [INFO] BUILD SUCCESS
>> [INFO]
>> [INFO] Total time: 17.022 s
>> [INFO] Finished at: 2018-06-27T21:49:29+05:30
>> [INFO] Final Memory: 11M/28M
```

### EXP 3: Install Jenkins in Cloud


```
Compute Engine - Jenkins - 0 X abdelrahman_ibrahim@math X +
ssh.cloud.google.com/projects/jenkins-250105/zones/us-west1-b/instances/math-in-jenkins?authuser=0&hl=en_US&projectNumber=56055297544
Connected, host fingerprint: ssh-rsa 0 47:53:C7:9D:40:92:0E:17:FC:73:C6:20:73:40
:73:0B:06:49:7C:C3:7F:B3:74:B4:69:EE:1E:86:61:EE:8E:7A
Linux math-in-jenkins 4.9.0-9-amd64 #1 SMP Debian 4.9.168-1+deb9u5 (2019-08-11)
x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/*copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
abdelrahman_ibrahim@math-in-jenkins:~$
```

## EXP 4: Create a CI Pipeline Using Jenkins

```
jenkinsuser@Jenkinsdemo123: $ sudo apt install default-jdk
Reading package lists... Done
Building dependency tree
Reading state information... Done
default-jdk is already the newest version (2:1.11-72).
0 upgraded, 0 newly installed, 0 to remove and 11 not upgraded.
jenkinsuser@Jenkinsdemo123: $ wget -q -O - https://pkg.jenkins.io/debian-stable/jenkins.io.key | sudo apt-key add -
OK
jenkinsuser@Jenkinsdemo123: $ sudo apt-get update
Hit:1 http://azure.archive.ubuntu.com/ubuntu focal InRelease
Hit:2 http://azure.archive.ubuntu.com/ubuntu focal-updates InRelease
Hit:3 http://azure.archive.ubuntu.com/ubuntu focal-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu focal-security InRelease
Reading package lists... Done
jenkinsuser@Jenkinsdemo123: $ sudo apt-get install jenkins
```

http://52.139.207.89:8080/ 

## Getting Started

# Unlock Jenkins

To ensure Jenkins is securely set up by the administrator, a password has been written to the log ([not sure where to find it?](#)) and this file on the server:

`/var/lib/jenkins/secrets/initialAdminPassword`

Please copy the password from either location and paste it below.

**Administrator password**

[Continue](#)

Dashboard > All >

 New Item 

 People

 Build History

 Manage Jenkins >

 My Views

 Lockable Resources


 New View



## Enter an item name

*» Required field*

 **Freestyle project**  
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.


## EXP 5: CI/CD Pipeline with Jenkins and Cloud Deployment


 **Jenkins**


Search (K+K)   admin log out


Dashboard >


+ New Item

 People


 Build History

 Manage Jenkins

 My Views

Build Queue 

No builds in the queue.

Build Executor Status 


1 Idle

2 Idle


### Welcome to Jenkins!


This page is where your Jenkins jobs will be displayed. To get started, you can set up distributed builds or start building a software project.


#### Start building your software project

Create a job 

#### Set up a distributed build

Set up an agent 

Configure a cloud 

Learn more about distributed builds 

## EXP 6: Ansible Playbook for Simple Web Application Infrastructure

```
ubuntu@ip-172-31-4-36:~/playbooks$ ansible-playbook nginx_install.yml

PLAY [Install Nginx and Deploy Website] *****

TASK [Gathering Facts] *****
ok: [server_3]
ok: [server_2]
ok: [server_1]






TASK [Update apt package cache] *****
changed: [server_3]
changed: [server_2]
changed: [server_1]

TASK [Install Nginx] *****
ok: [server_1]
ok: [server_2]
ok: [server_3]

TASK [Start Nginx] *****
ok: [server_2]
ok: [server_1]
ok: [server_3]

TASK [Deploy website] *****
changed: [server_3]
changed: [server_2]
changed: [server_1]

PLAY RECAP *****
server_1      : ok=5    changed=2    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
server_2      : ok=5    changed=2    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
server_3      : ok=5    changed=2    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
```

← → ↻ ⚠ Not secure | 3.111.41.48     

### By Vishal






#### Task of the Day

Pages (HTML)

Style Sheets (CSS)

Computer Code (JavaScript)

Live Data (Files and Databases)

← → ↻ ⚠ Not secure | 65.0.122.202     

### By Vishal

#### Task of the Day

Pages (HTML)

Style Sheets (CSS)

Computer Code (JavaScript)

Live Data (Files and Databases)

## EXP 7: Build a Simple Application using Gradle

```
C:\Users\HiMaNshU\Java_application>gradlew run

> Task :run
Hello world.

BUILD SUCCESSFUL in 3s
2 actionable tasks: 1 executed, 1 up-to-date
C:\Users\HiMaNshU\Java_application>
```

## EXP 8: Ansible Installation, Roles, and Playbooks

```
didier@lab:~/ansible$ ansible-playbook -i inventory.yaml dynamic_motd_playbook.yml

PLAY [Configure Dynamic motd] *****
TASK [Gathering Facts] *****
ok: [server1]

TASK [dynamic_motd : Copy dynamic motd template] *****
changed: [server1]

PLAY RECAP *****
server1 : ok=2  changed=1  unreachable=0  failed=0  skipped=0  rescued=0  ignored=0
```

```
didier@lab:~$ ssh didier@server1
Linux blackhawk 6.1.0-11-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.38-4 (2023-08-08) x86_64
Welcome to blackhawk!

System information:
OS: Debian 12
Hostname: blackhawk
IP Address: 192.168.100.57
Last login: Tue Oct  3 00:15:19 2023 from 192.168.100.28
```