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STD: DIV./SEC: SUBJECT: CLOUD LAB MANUAL

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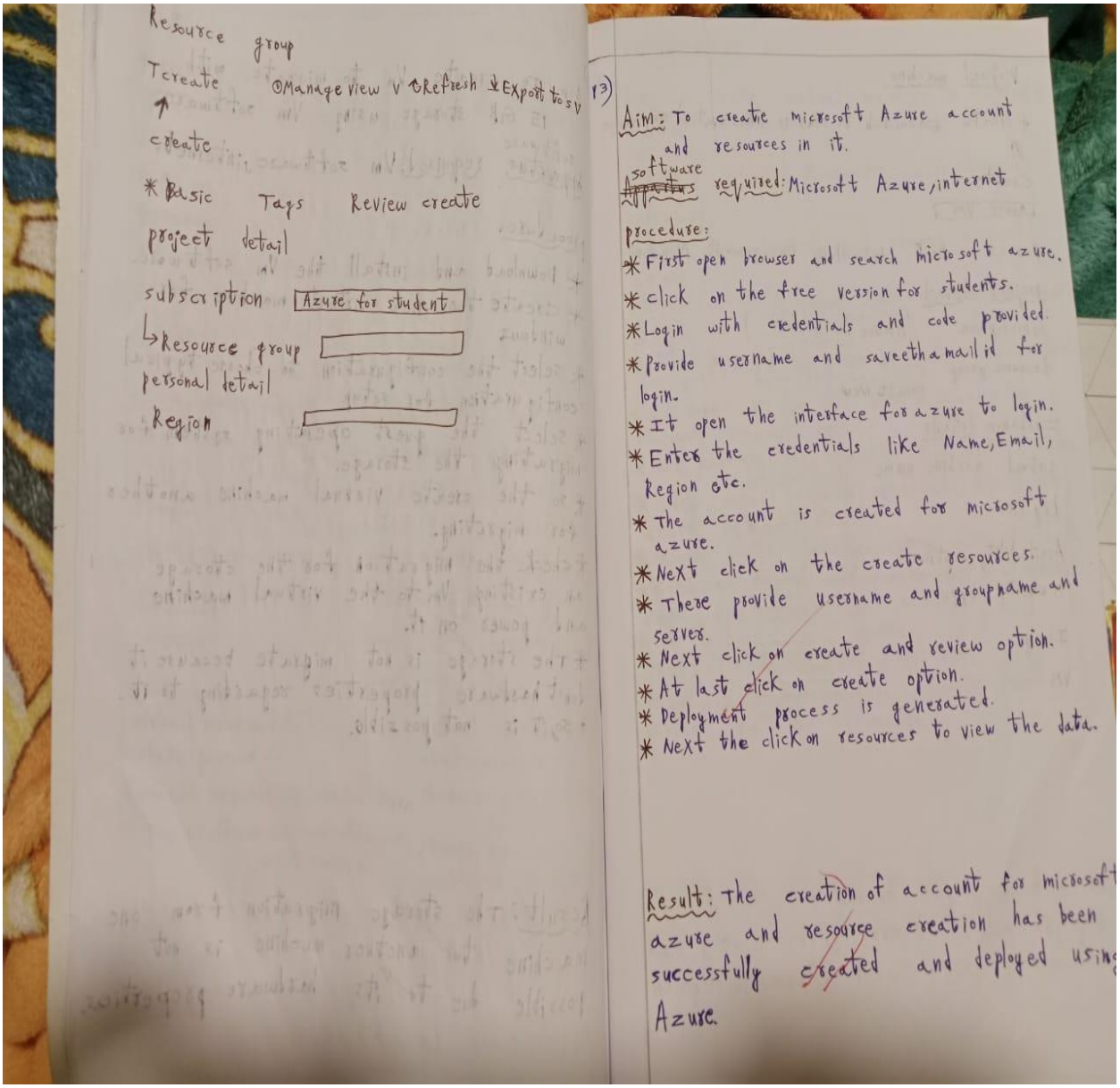
EXPERIMENT NO:13

13. To create a Microsoft azure account and resources



Resource group

Tcreate ⊙Manage view ∨ ↻Refresh ↓Export to sv

↑

create

* Basic Tags Review create

project detail

subscription Azure for student

↳Resource group

personal detail

Region

13)

Aim: To create microsoft Azure account and resources in it.

Software required: Microsoft Azure, internet

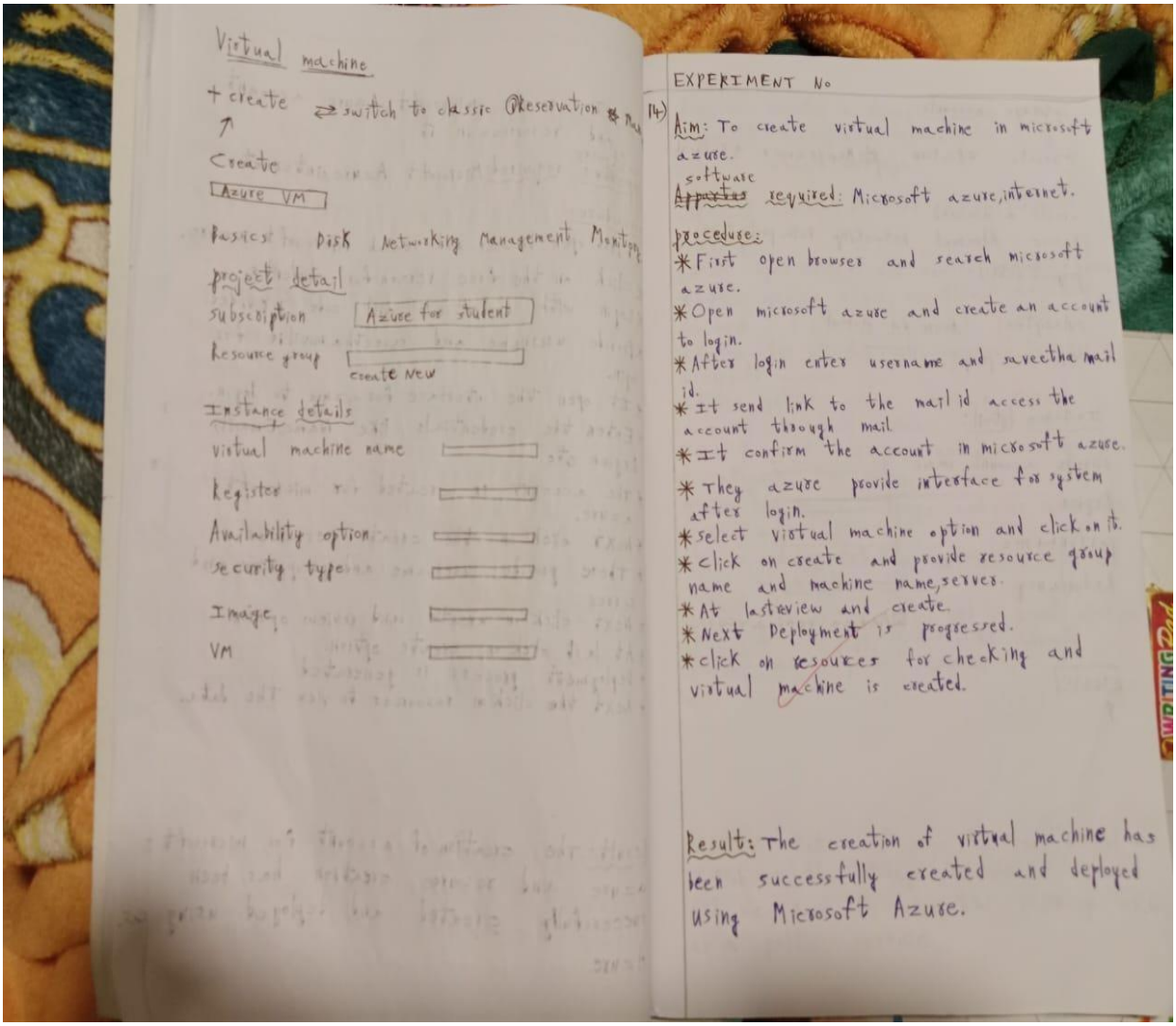
procedure:

* First open browser and search microsoft azure.
* click on the free version for students.
* Login with credentials and code provided.
* Provide username and saveetha mail id for login.
* It open the interface for azure to login.
* Enter the credentials like Name, Email, Region etc.
* The account is created for microsoft azure.
* Next click on the create resources.
* There provide username and groupname and server.
* Next click on create and review option.
* At last click on create option.
* Deployment process is generated.
* Next the click on resources to view the data.

Result: The creation of account for microsoft azure and resource creation has been successfully created and deployed using Azure.

EXPERIMENT NO:14

14. To create a virtual machine in Microsoft azure



Virtual machine

+ create ⇄ switch to classic (Preservation)

Create

Azure VM

Basics Disk Networking Management Monitor

project detail

subscription [Azure for student]

Resource group

create new

Instance details

virtual machine name

Register

Availability option

security type

Image

VM

EXPERIMENT No 14

Aim: To create virtual machine in microsoft azure.

software

~~Apparatus~~ required: Microsoft azure, internet.

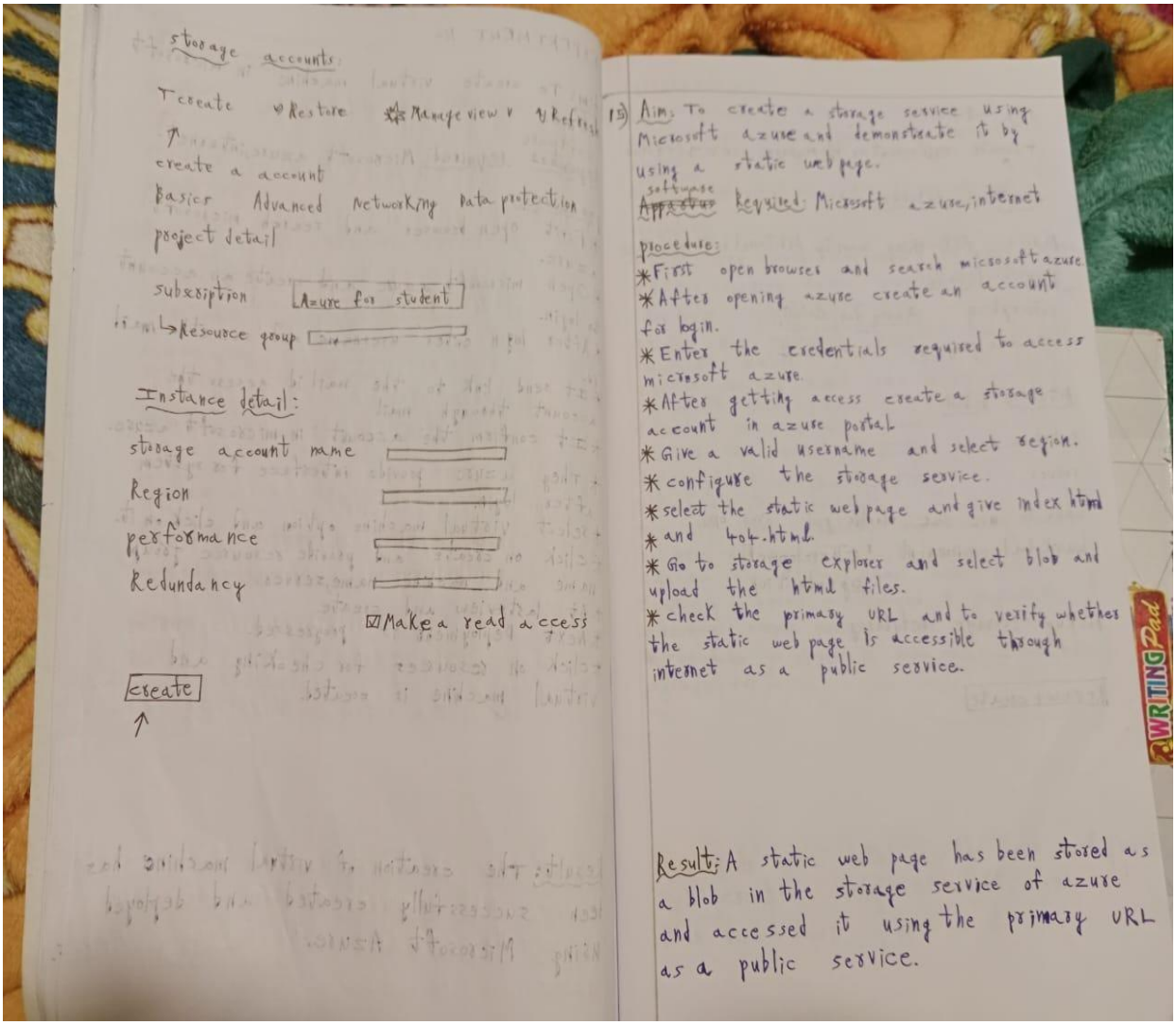
procedure:

* First open browser and search microsoft azure.
* Open microsoft azure and create an account to login.
* After login enter username and saveetha mail id.
* It send link to the mail id access the account through mail
* It confirm the account in microsoft azure.
* They azure provide interface for system after login.
* select virtual machine option and click on it.
* click on create and provide resource group name and machine name, servers.
* At last review and create.
* Next Deployment is progressed.
* click on resources for checking and virtual machine is created.

Result: The creation of virtual machine has been successfully created and deployed using Microsoft Azure.

EXPERIMENT NO:15

15. To create a storage service using Microsoft azure



storage accounts

+ create | Restore | Manage view | Refresh

↑ create a account

Basics | Advanced | Networking | Data protection

project detail

subscription [Azure for student]

↳ Resource group

Instance detail:

storage account name

Region

performance

Redundancy

☑ Make a read access

[create]

↑

15) Aim: To create a storage service using Microsoft azure and demonstrate it by using a static web page.

Software Required: Microsoft azure, internet

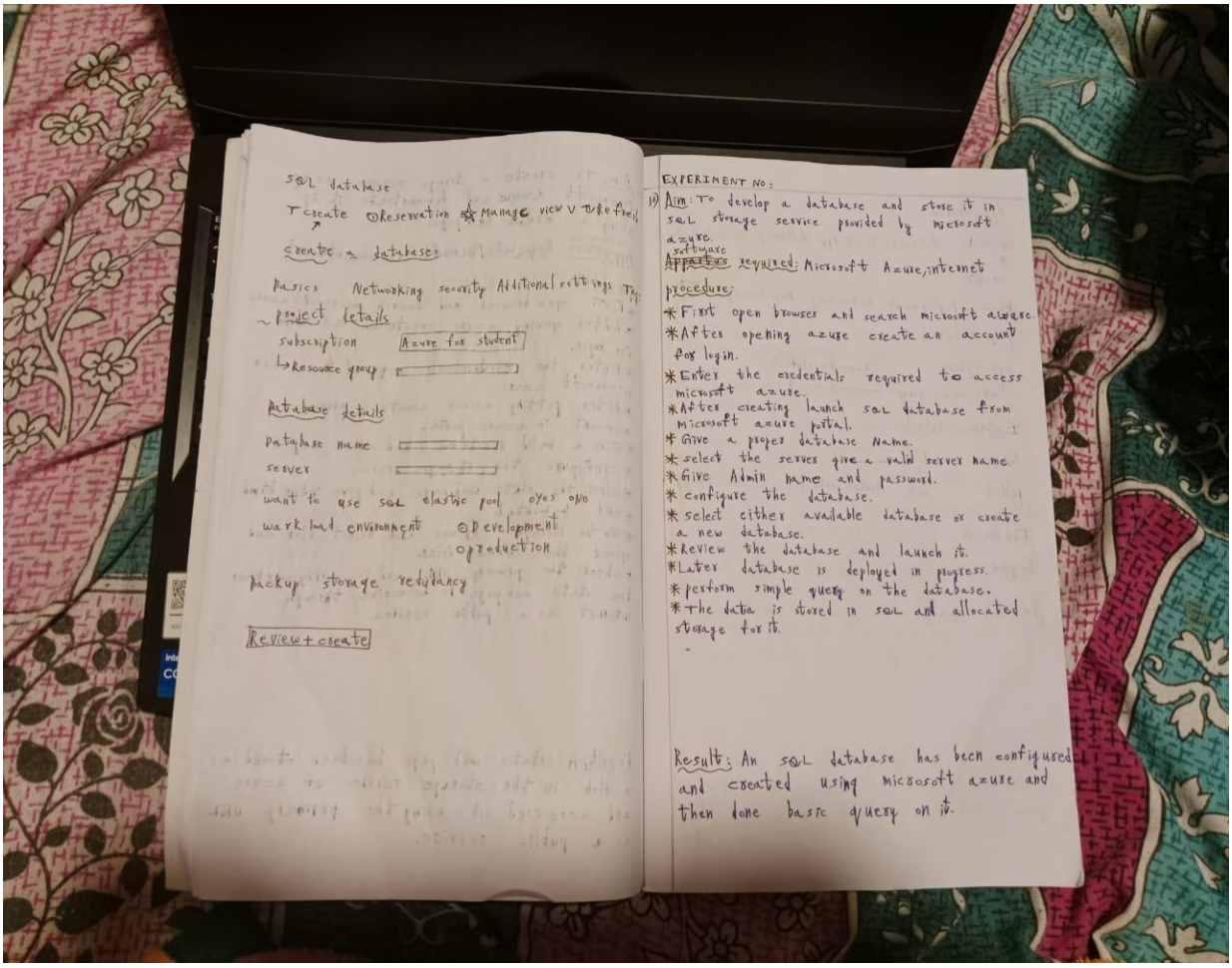
procedure:

* First open browser and search microsoft azure
* After opening azure create an account for login.
* Enter the credentials required to access microsoft azure.
* After getting access create a storage account in azure portal.
* Give a valid username and select region.
* configure the storage service.
* select the static web page and give index html and 404.html.
* Go to storage explorer and select blob and upload the html files.
* check the primary URL and to verify whether the static web page is accessible through internet as a public service.

Result: A static web page has been stored as a blob in the storage service of azure and accessed it using the primary URL as a public service.

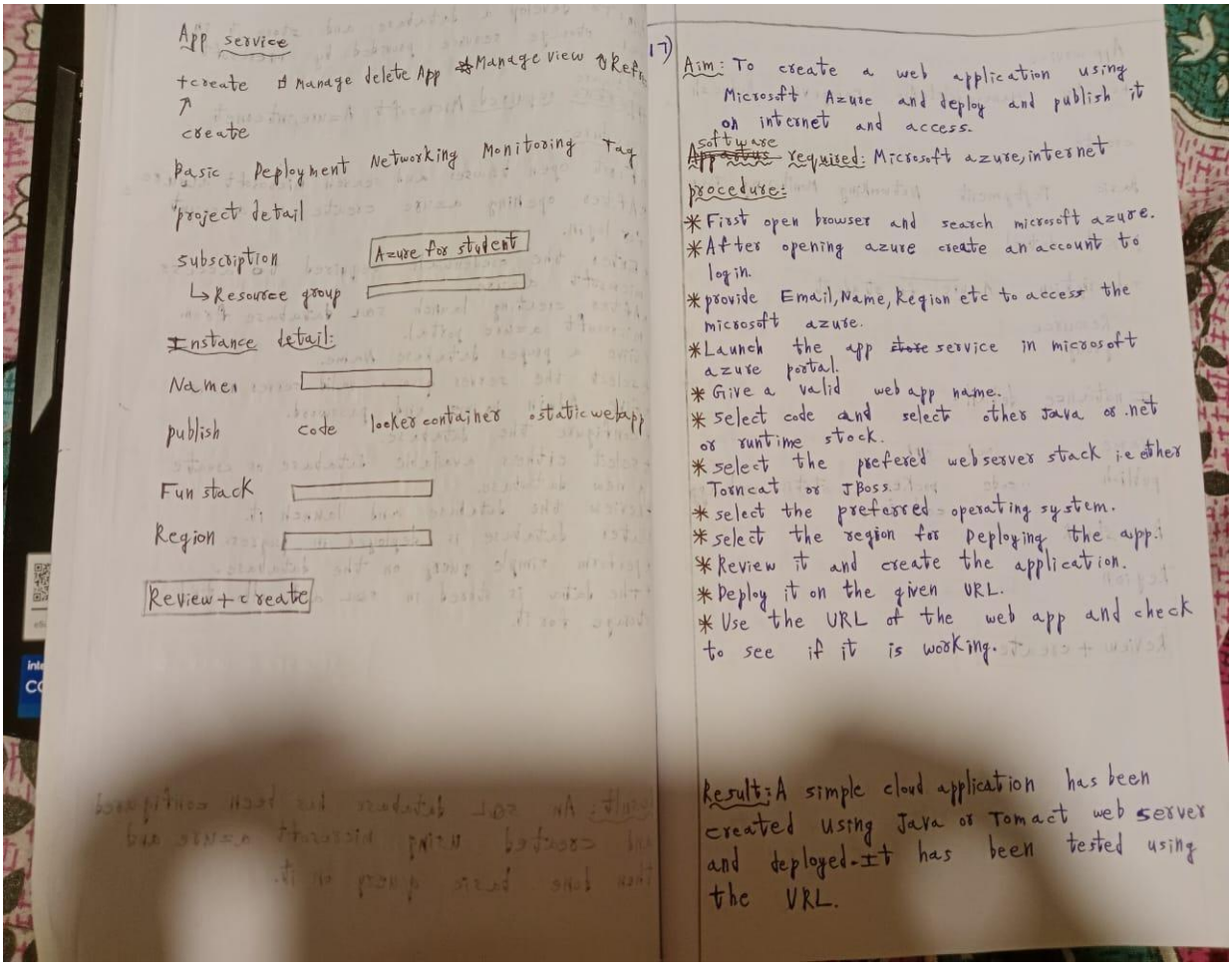
EXPERIMENT NO:16

16. To develop a database and store it in SQL storage using Microsoft azure



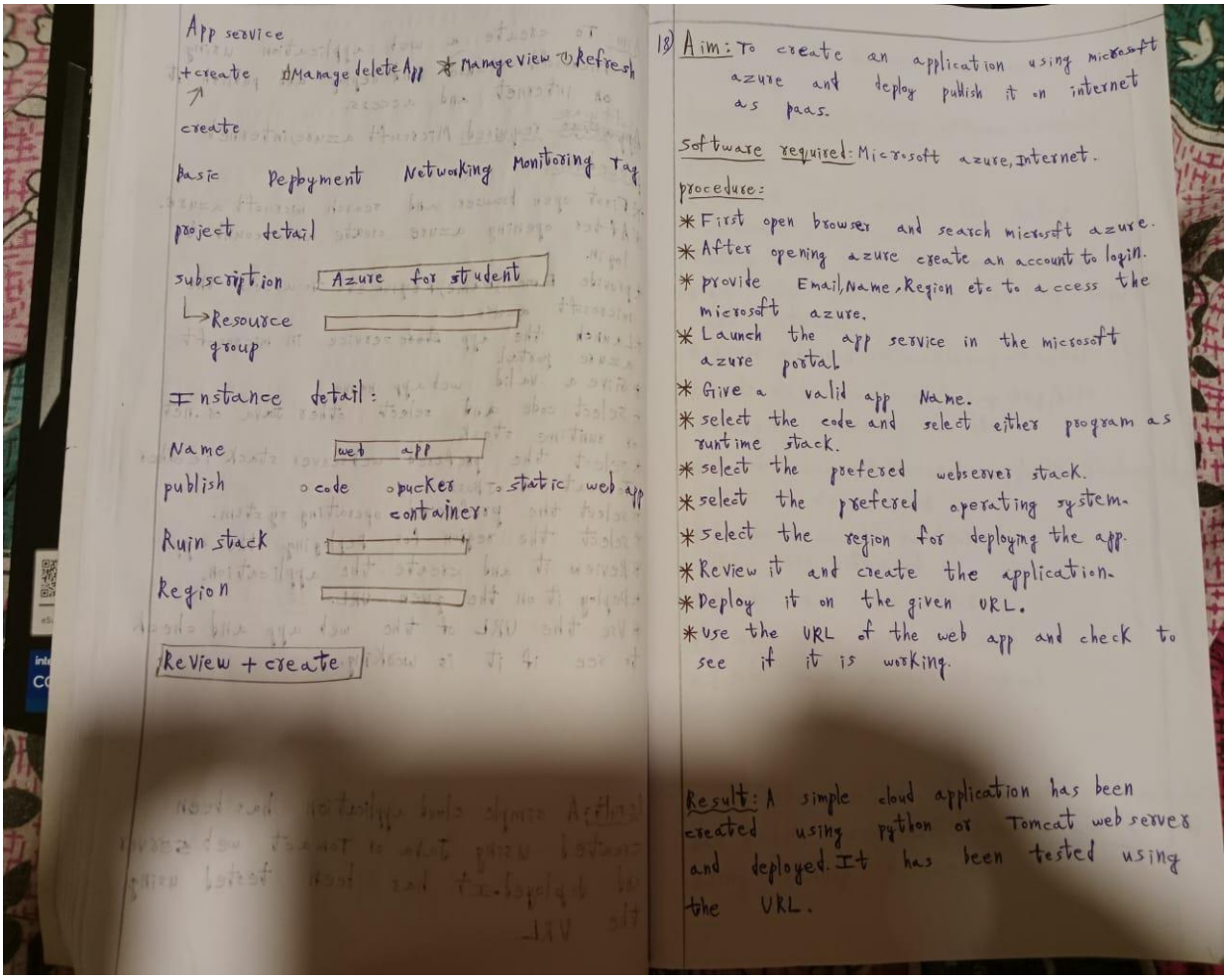
EXPERIMENT NO:17

17. To create a web application using Microsoft azure



EXPERIMENT NO:18

18. To create an application using Microsoft azure


App service

+create Manage delete App Manage view Refresh

create

Basic Pepbyment Networking Monitoring Tag

project detail

subscription Azure for student

Resource group

Instance detail:

Name web app

publish code docker container static web app

Ruin stack

Region

Review + create

18) Aim: To create an application using microsoft azure and deploy publish it on internet as paas.

Software required: Microsoft azure, internet.

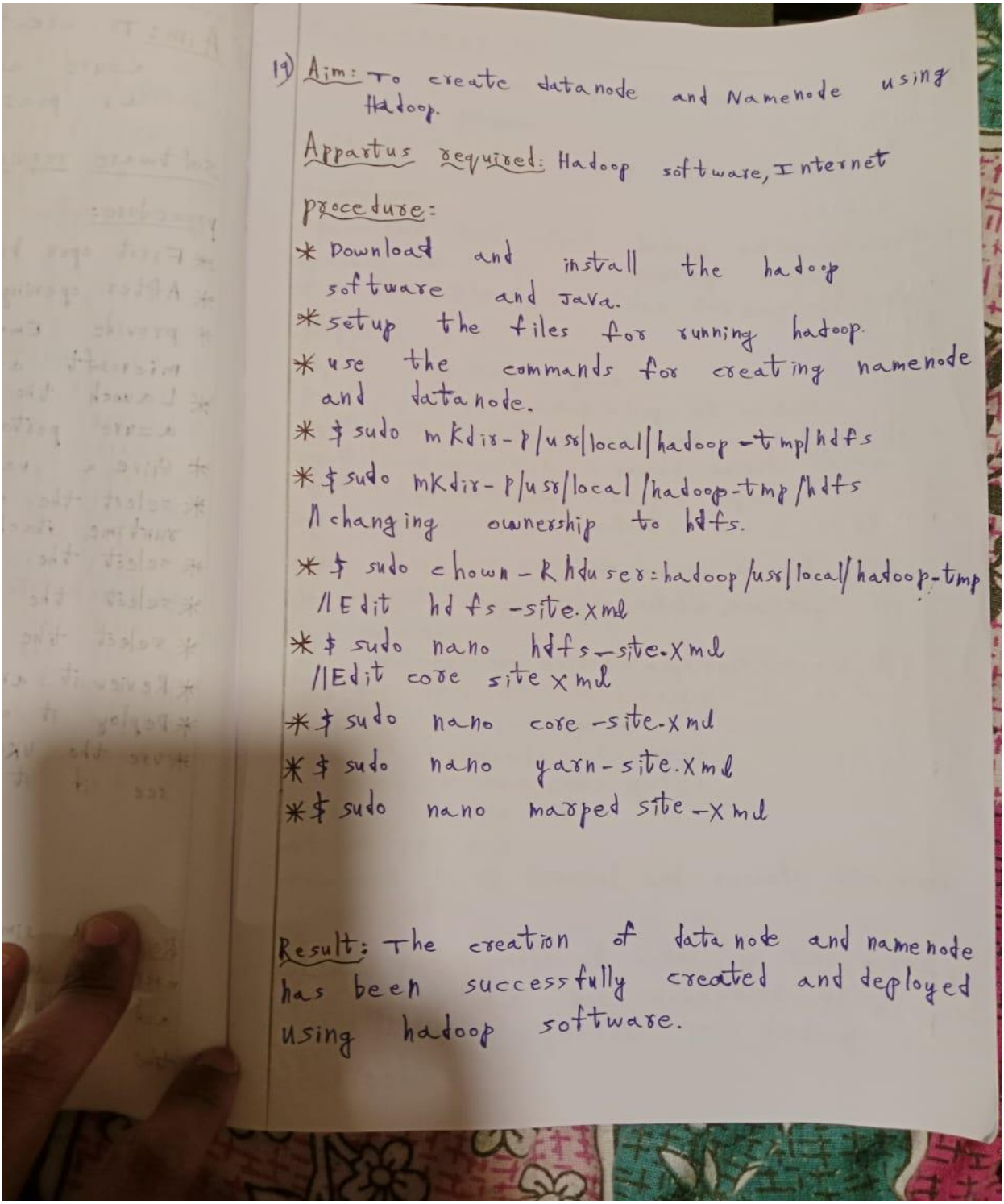
procedure:

* First open browser and search microsoft azure.
* After opening azure create an account to login.
* provide Email, Name, Region etc to access the microsoft azure.
* Launch the app service in the microsoft azure portal.
* Give a valid app Name.
* select the code and select either program as runtime stack.
* select the prefered webserver stack.
* select the prefered operating system.
* select the region for deploying the app.
* Review it and create the application.
* Deploy it on the given URL.
* use the URL of the web app and check to see if it is working.

Result: A simple cloud application has been created using python or Tomcat web servers and deployed. It has been tested using the URL.

EXPERIMENT NO:19

19. To create a Data node and name node in Hadoop architecture



19) Aim: To create datanode and Namenode using Hadoop.

Apparatus required: Hadoop software, Internet

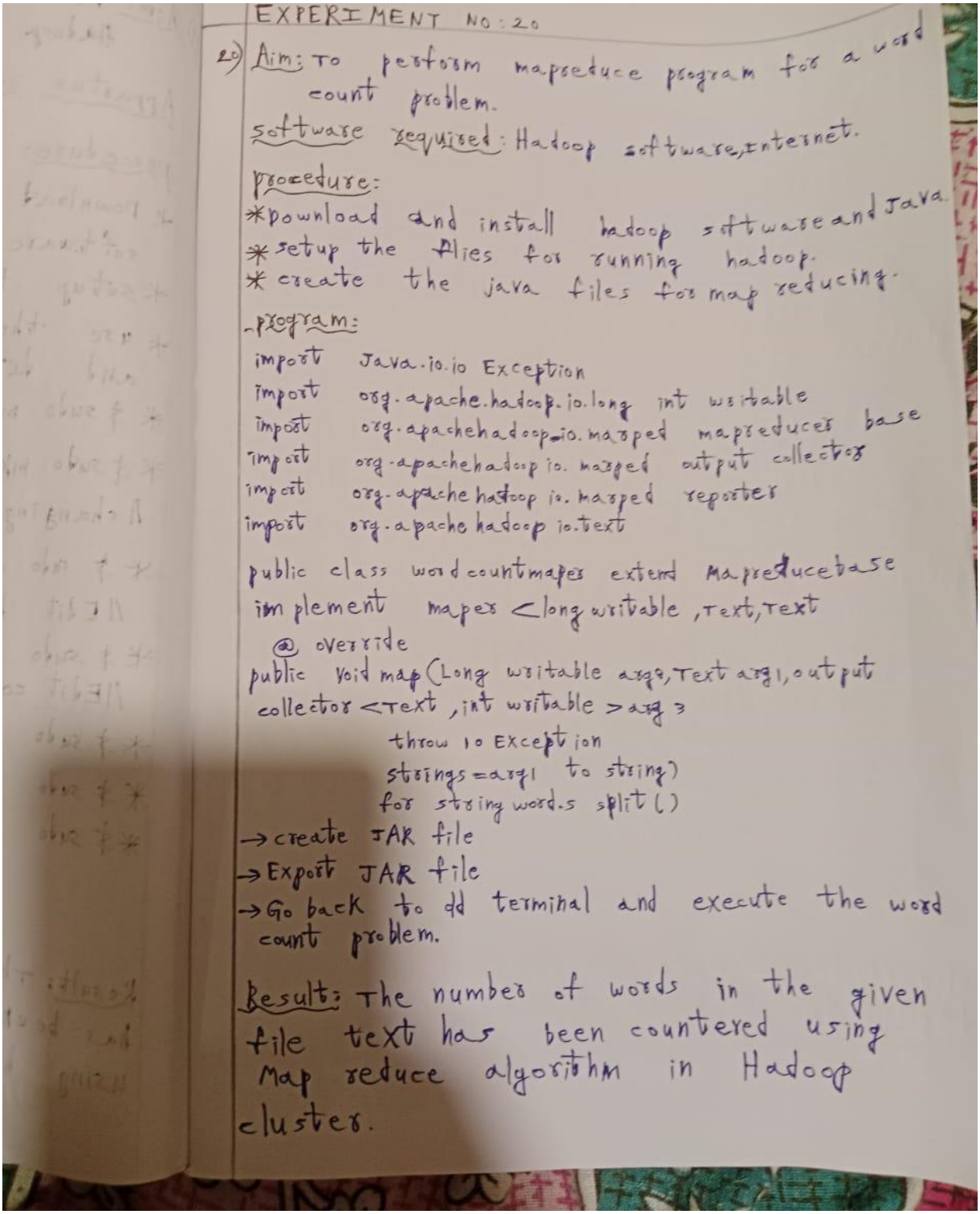
procedure:

* Download and install the hadoop software and java.
* setup the files for running hadoop.
* use the commands for creating namenode and datanode.
* $ sudo mKdir -p /usr/local/hadoop -tmp/hdfs
* $ sudo mKdir -p /usr/local /hadoop-tmp /hdfs
// changing ownership to hdfs.
* $ sudo chown -R hduser:hadoop /usr/local/hadoop-tmp
//Edit hdfs -site.xml
* $ sudo nano hdfs -site.xml
//Edit core site xml
* $ sudo nano core -site-xml
* $ sudo nano yarn-site.xml
* $ sudo nano marped site -xml

Result: The creation of data node and name node has been successfully created and deployed using hadoop software.

EXPERIMENT NO:20

20. To create a map reduce program in java using Hadoop



EXPERIMENT NO: 20

20) Aim: To perform mapreduce program for a word count problem.

Software required: Hadoop software, Internet.

Procedure:

* Download and install hadoop software and Java.
* setup the files for running hadoop.
* create the java files for map reducing.

Program:

```
import java.io.io Exception
import org.apache.hadoop.io.long int writable
import org.apachehadoop.io.mapped mapreducer base
import org.apachehadoop io. mapped output collector
import org.apache hadoop io. mapped reporter
import org.apache hadoop io.text

public class word countmaper extend Mapreducebase
implement maper <long writable, Text, Text
  @ override
public void map (Long writable arg0, Text arg1, output
collector <Text, int writable > arg 3
                throw io Exception
                strings = arg1 to string)
                for string word.s split ()
```

→ create JAR file
→ Export JAR file
→ Go back to dd terminal and execute the word count problem.

Result: The number of words in the given file text has been countered using Map reduce algorithm in Hadoop cluster.