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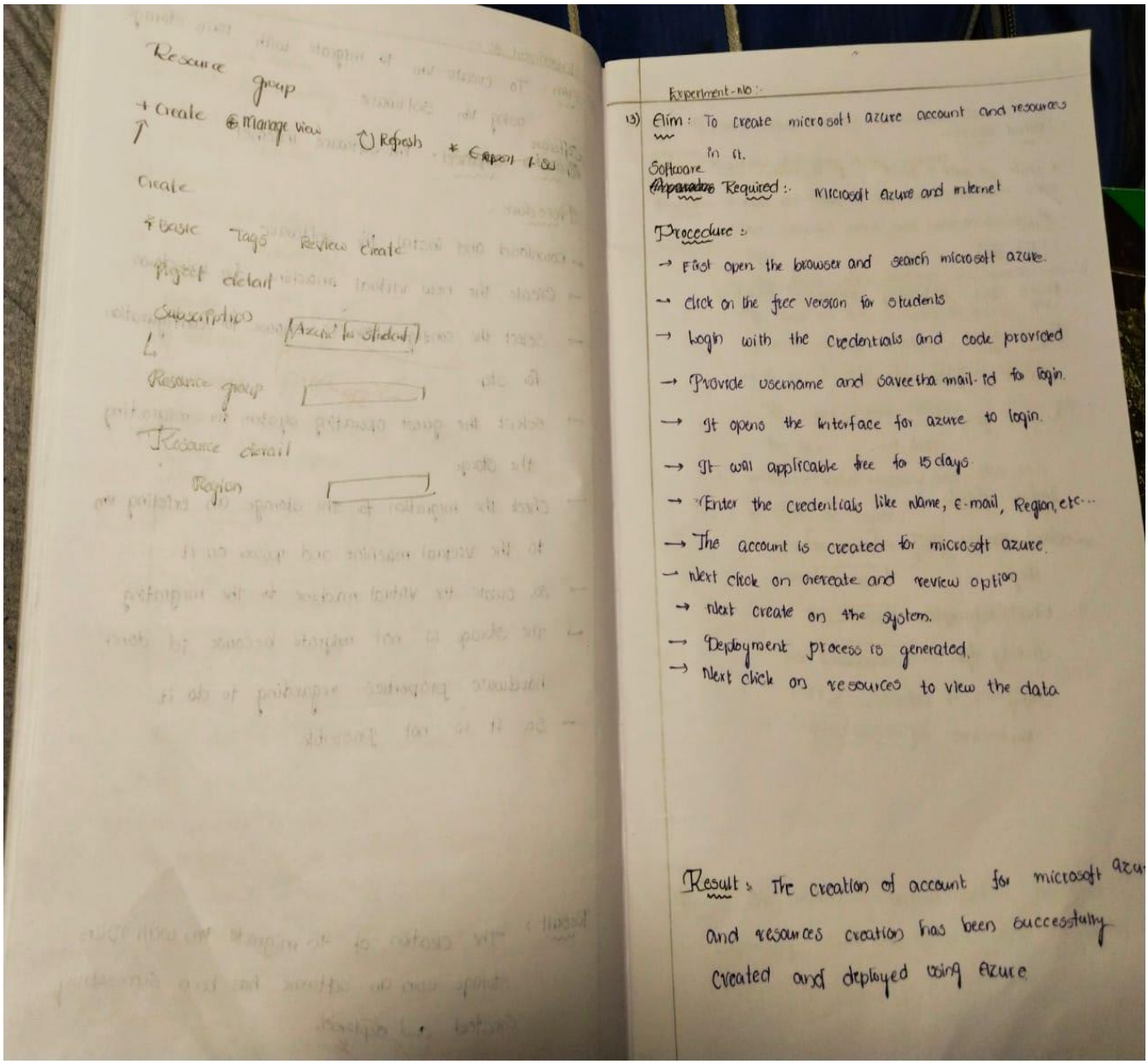
Experiment No:13

13. To create a Microsoft azure account and resources



Resource group

+ Create Manage view Refresh Export to CSV

Create

* Basic Tags Review + create

Project details

Subscription [Azure for Student]

Resource group

Resource details

Region

Experiment-No :-

13) Aim : To create microsoft azure account and resources in it.

Software Required :- Microsoft Azure and internet

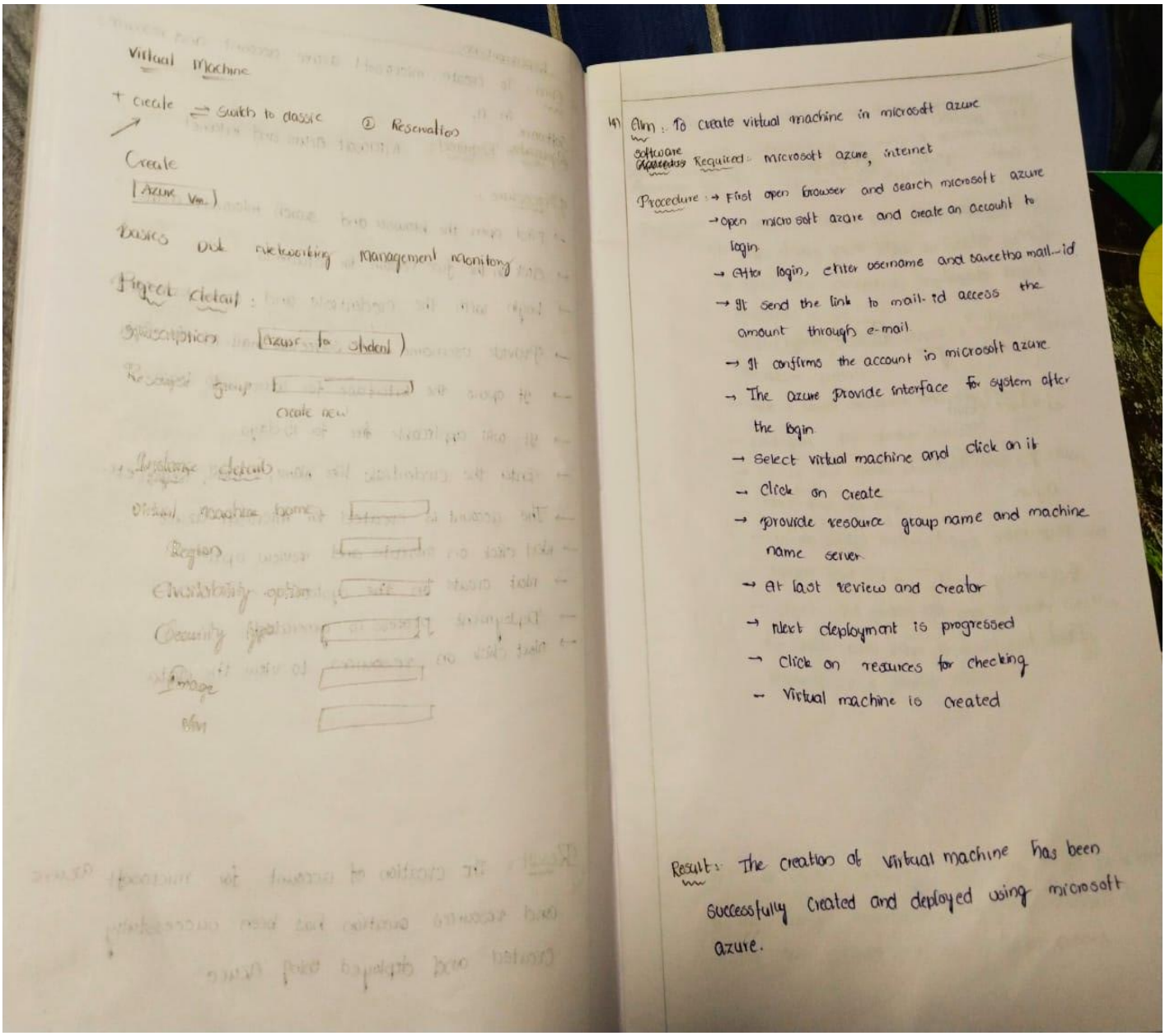
Procedure :-

→ First open the browser and search microsoft azure.
→ Click on the free version for students
→ Login with the credentials and code provided
→ Provide username and saveetha mail-id to login.
→ It opens the interface for azure to login.
→ It will applicable free for 15 days
→ Enter the credentials like name, e-mail, Region, etc...
→ The account is created for microsoft azure.
→ Next click on overcreate and review option
→ Next create on the system.
→ Deployment process is generated.
→ Next click on resources to view the data

Result : The creation of account for microsoft azu and resources 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 ② Reservation

Create

[Azure Vm.]

Basics Disk networking Management monitoring

Project details :

Subscription [Azure for student]

Resource group [ ]

create new

Instance details

Virtual machine name [ ]

Region [ ]

Availability options [ ]

Security type [ ]

Image [ ]

[ ]

14) Aim : To create virtual machine in microsoft azure

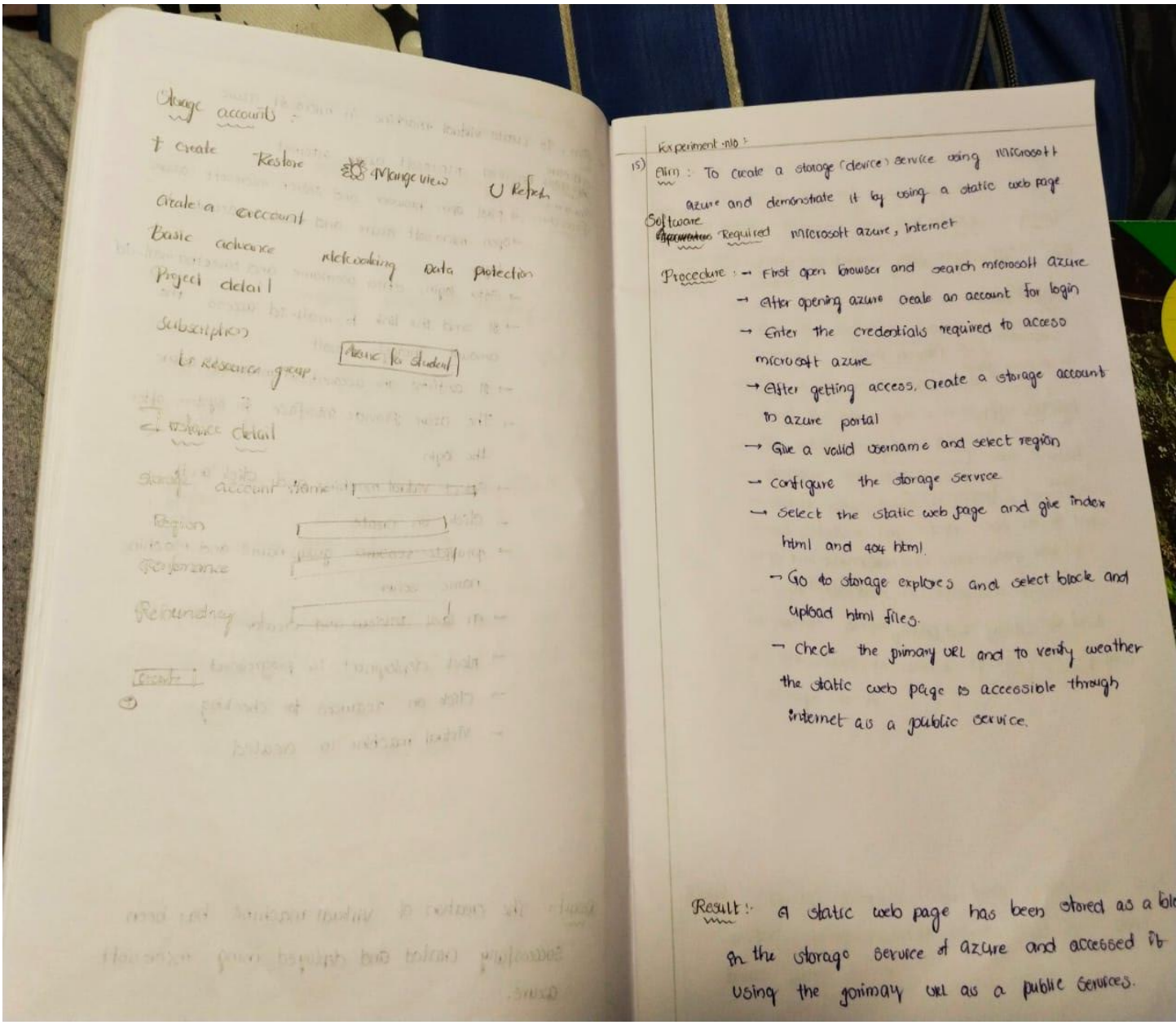
Software Required : microsoft azure, internet

Procedure : → First open browser and search microsoft azure
→ open microsoft azure and create an account to login
→ After login, enter username and password a mail-id
→ It send the link to mail-id access the amount through e-mail
→ It confirms the account in microsoft azure
→ The azure provide interface for system after the login
→ Select virtual machine and click on it
→ Click on create
→ provide resource group name and machine name server
→ At last review and creator
→ Next deployment is progressed
→ Click on resources for checking
→ 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

Basic advance networking Data protection

Project detail

Subscription

Resource group Basic for student

Instance detail

Storage account name

Region

Performance

Redundancy

Review + create

Experiment no:

15) Aim : To create a storage (device) service using Microsoft Azure and demonstrate it by using a static web page

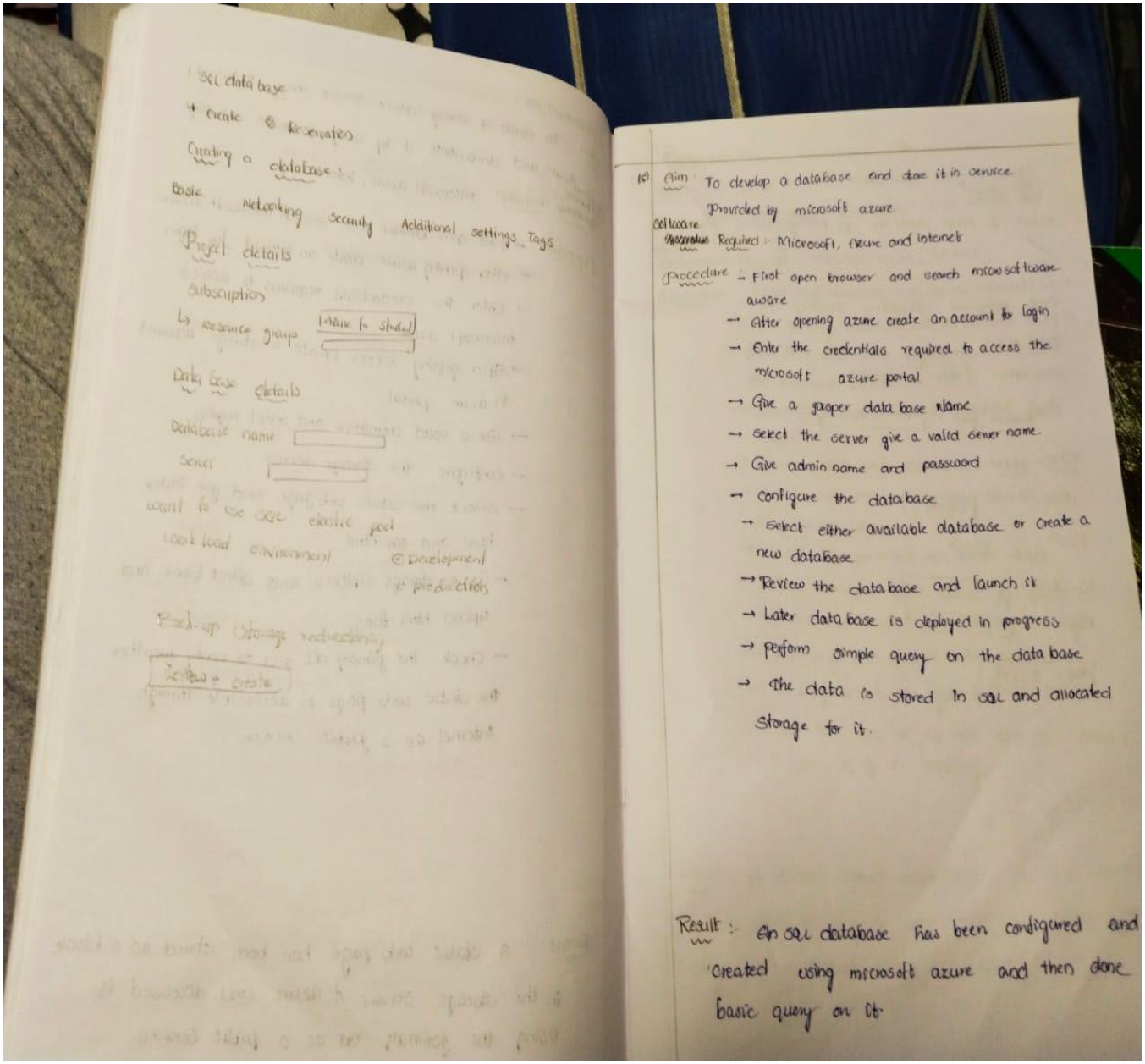
Software Required Microsoft azure, Internet

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 blocks and upload html files.
- Check the primary URL and to verify weather the static web page is accessible through internet as a public service.

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

Experiment No:16

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



SQL data base

+ create ⊗ Reservation

Creating a database

Basic Networking Security Additional settings Tags

Project details

Subscription

↳ resource group (create in student)

Data base details

Database name

Server

want to use SQL elastic pool

work load environment ⊙ development

Review + create

16) Aim: To develop a database and store it in service provided by microsoft azure

Software Required: Microsoft, Azure and internet

Procedure → First open browser and search microsoft azure

→ After opening azure create an account to login

→ Enter the credentials required to access the microsoft azure portal

→ Give a proper data base name

→ Select the server give a valid server name.

→ Give admin name and password

→ configure the database

→ Select either available database or create a new database

→ Review the database and launch it

→ Later data base is deployed in progress

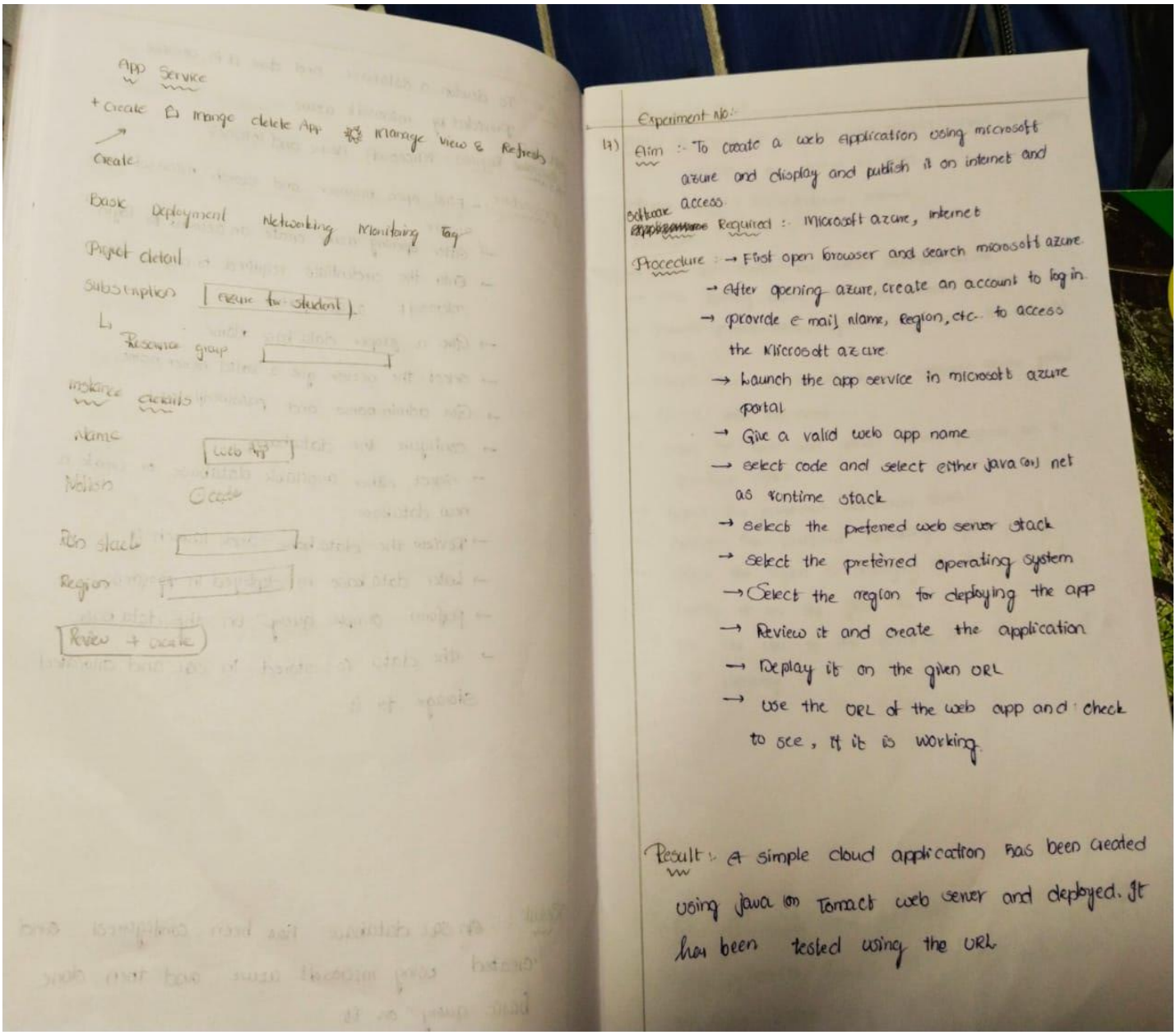
→ Perform simple query on the data base

→ The data is stored in SQL and allocated storage for it.

Result: An SQL database has been configured and created using microsoft azure and then done basic query on it.

Experiment No:17

17. To create a web application using Microsoft azure



App Service

+ Create | Manage | delete App | Manage view & Refresh

Create

Basic | Deployment | Networking | Monitoring | Tag

Project detail

Subscription [Azure for student]

Resource group

Instance details

Name [Web App]

Publish Code

Runtime stack

Region

[Review + create]

Experiment No:-

17) Aim :- To create a web application using microsoft azure and display and publish it on internet and access.

Software Required :- Microsoft azure, internet

Procedure :- → First open browser and search microsoft azure.

→ After opening azure, create an account to log in.

→ provide e-mail, name, Region, etc. to access the Microsoft azure

→ launch the app service in microsoft azure portal

→ Give a valid web app name

→ select code and select either java or .net as runtime stack

→ select the pretered web server stack

→ select the preferred 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 java on Tomact web server and deployed. It has been tested using the URL

Experiment No:18

18. To create a application using Microsoft azure

Experiment No :18

Aim : To create an application using microsoft azure and deploy (platform) 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 E-mail, 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 a run-time stack.
→ Select the preferred webserver stack
→ Select the preffered operating system
→ Select the region for deploying the app
→ Deploy it on the given URL
→ Use the URL of the web app and check, see if it is working.

Result : A) Simple cloud application has been created using python as Tomcat web-server and deployed. It has been tested using the URL.

Experiment No:19

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

Experiment - 19

Aim:- To create datanode and namenode using hadoop

Apparatus Required: Hadoop software, internet

Procedure:

→ Download and instal the hadoop software and Java.

→ Set up the files for running hadoop.

→ use the commands for creating namenode and datanode

→ $udo mkdir -p /usr/local/hadoop-tmp/hdfs

→ $sudo mkdir -p /usr/local/hadoop-tmp/hdfs

→ $sudo chown -R hduser:hadoop /usr/local/hadoop tmp

Edit hdfs-site.xml

→ $sudo nano hdfs-site.xml

→ $sudo nano hdfs-site-xml

Edit core site.xml

→ $sudo nano core-site.xml

→ $ sudo nano yarn-site.xml

→ $ sudo nano mapred site-xml

Result: The creation of datanode and namenode has been successfully created and deployed using hadoop software

Experiment No:20

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

Experiment: 20

Aim: To perform MapReduce programs from a word ... problem

Software required: Hadoop software, internet

Procedure: → Download and install Hadoop software and Java
→ Set-up the files for running hadoop
→ Create the Java files for map reducing

program:

```
import java.io.IOException
import org.apache.hadoop.io.LongWritable
impt org.apache.hadoop.io.mapred.MapReduceBase
import org.apache.hadoop.io.mapred.OutputCollector
import org.apache.hadoop.io.mapred.Reporter
import org.apache.hadoop.io.Text

public class WordCountMapper extends MapReduceBase
implement Mapper<LongWritable, Text,
  @Override
public void map(LongWritable arg0, Text arg, OutputCollector).
                throws IOException
  String s = arg1.toString();
  for String word : s.split()
```

Result: The number of words in the file text has been countered using map reducing algorithm in Hadoop cluster,