



# Lab 7: Question from Insem Paper.

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IT457 Cloud Computing

4/14/24



## Question 8:

Code Used: -

```
using Azure.Storage.Blobs;
using System;
using System.IO;
using System.Security.Cryptography;
using System.Threading.Tasks;

class Program
{
    static async Task Upload_Large_FTB(string connection_str, string filep,
string cname, string bname)
    {
        BlobServiceClient blobclient = new BlobServiceClient(connection_str);

        BlobContainerClient cclient = blobclient.GetBlobContainerClient(cname);

        BlobClient blobClient = cclient.GetBlobClient(bname);

        long blockS = 4 * 1024 * 1024; // 4MB block size

        byte[] buff = new byte[blockS];

        using (FileStream fileStream = File.OpenRead(filep))
        {
            long file_size = fileStream.Length;

            long byteloaded = 0;

            string[] blkIds = new string[(int)Math.Ceiling((double)file_size /
blockS)];

            while (byteloaded < file_size)
            {
                int bytesRead = await fileStream.ReadAsync(buff, 0,
(int)Math.Min(blockS, file_size - byteloaded));

                using (MD5 md5 = MD5.Create())
                // Calculate MD5 hash of the block
```



```
        {
            byte[] blkHash = md5.ComputeHash(buff, 0, bytesRead);

            string blkId = Convert.ToBase64String(blkHash);

            // Upload the block
            using (MemoryStream mstream = new MemoryStream(buff, 0,
bytesRead))
            {
                await blobClient.StageBlockAsync(blkId, mstream);
            }

            blkIds[byteloaded / blockS] = blkId;
        }

        byteloaded += bytesRead;
    }

    // Commit the list of blocks
    await blobClient.CommitBlockListAsync(blkIds);
}

Console.WriteLine("File uploaded successfully.");
}

static async Task Main(string[] args)
{
    string connection_str = "<your_connection_string>";

    string filep = "<path_to_your_file>";
    string cname = "<your_container_name>"; // container name

    string bname = "<your_blob_name>"; // blob name

    await Upload_Large_FTB(connection_str, filep, cname, bname);
}
}
```



## Question 11: -

### Creating SQL database: -

✓ Your deployment is complete

Deployment name : Microsoft.SQLDatabase.newDatabaseNewServer\_2e94416f274147... Start time : 4/21/2024, 5:59:24 PM  
Subscription : Azure for Students Correlation ID : 1b9e32ed-e047-4be1-85db-1a74693a0f0c  
Resource group : Storage1

Deployment details

Resource	Type	Status	Operation details
✓ server2104/Db1	SQL database	Created	<a href="#">Operation details</a>
✓ server2104/Default	Microsoft.Sql/servers/connection	OK	<a href="#">Operation details</a>
✓ server2104	SQL server	OK	<a href="#">Operation details</a>
✓ server2104	SQL server	Created	<a href="#">Operation details</a>

```
1 CREATE TABLE GameData (  
2     GameID INT PRIMARY KEY,  
3     ChildID INT,  
4     Answer NVARCHAR(100),  
5     Timestamp DATETIME,  
6     Score INT  
7 );
```

### Creating blob storage: -

✓ Your deployment is complete

Deployment name: storage134244\_1713704839747  
Subscription: Azure for Students  
Resource group: cloud-shell-storage-centralindia

Start time: 4/21/2024, 6:39:17 PM

Correlation ID: 711f004d-aaaa-49f5-922d-8bce620831c9

Deployment details

Resource	Type	Status	Operation details
✓ storage134244/default	Microsoft.Storage/storageAccounts/filese...	OK	<a href="#">Operation details</a>
✓ storage134244/default	Microsoft.Storage/storageAccounts/blob...	OK	<a href="#">Operation details</a>
✓ storage134244	Microsoft.Storage/storageAccounts	OK	<a href="#">Operation details</a>



## Lab- Cloud Computing

storage134244 | Containers

Storage account

Search

Overview

Activity log

Tags

Diagnose and solve problems

Access Control (IAM)

Data migration

Events

Container

Change access level

Restore containers

Refresh

Delete

Give feedback

Search containers by prefix

Name	Last modified	Anonymous access level
\$logs	4/21/2024, 6:39:47 PM	Private
childinfo	4/21/2024, 6:47:41 PM	Blob

## Creating Face API: -

### ✓ Your deployment is complete

Deployment name : Microsoft.CognitiveServicesFace-20240421185034  
Subscription : [Azure for Students](#)  
Resource group : [Storage1](#)

Start time : 4/21/2024, 6:52:09 PM  
Correlation ID : 48dbacfa-2e03-439a-80f7-d7a61d8fd658

#### Deployment details

Resource	Type	Status	Operation details
✓ <a href="#">facerec2104</a>	Azure AI services	OK	<a href="#">Operation details</a>

#### Next steps

## Creating Function App: -

### ✓ Your deployment is complete

Deployment name: Microsoft.Web-FunctionApp-Portal-bbe4bfc9-a-... Start time: 4/21/2024, 7:02:11 PM  
Subscription: [Azure for Students](#) Correlation ID: fd8bd73e-33cf-450c-a679-bceada2ac29b

Resource group: [Storage1](#)

#### Deployment details

Resource	Type	Status	Operation details
✓ <a href="#">funcapp2104/scm</a>	Microsoft.Web/sites/basicPublishingCre...	OK	<a href="#">Operation details</a>
✓ <a href="#">funcapp2104/ftp</a>	Microsoft.Web/sites/basicPublishingCre...	OK	<a href="#">Operation details</a>
✓ <a href="#">funcapp2104</a>	Microsoft.Web/sites	OK	<a href="#">Operation details</a>
✓ <a href="#">funcapp2104</a>	microsoft.insights/components	OK	<a href="#">Operation details</a>
✓ <a href="#">funcapp2104</a>	microsoft.insights/components	OK	<a href="#">Operation details</a>
✓ <a href="#">storage18018</a>	Microsoft.Storage/storageAccounts	OK	<a href="#">Operation details</a>
✓ <a href="#">ASP-Storage1-b679</a>	Microsoft.Web/serverfarms	OK	<a href="#">Operation details</a>
✓ <a href="#">storage18018</a>	Microsoft.Storage/storageAccounts	OK	<a href="#">Operation details</a>
✓ <a href="#">newWorkspaceTemplate</a>	Microsoft.Resources/deployments	OK	<a href="#">Operation details</a>



## Creating Queue storage: -

✓ Your deployment is complete



Deployment name: storage21114\_1713706885799  
Subscription: [Azure for Students](#)  
Resource group: [Storage1](#)

Start time: 4/21/2024, 7:11:59 PM

Correlation ID: e5c73fa3-e93a-4e8a-827b-666bf5848b50



### Deployment details

Resource	Type	Status	Operation details
✓ <a href="#">storage21114/default</a>	Microsoft.Storage/storageAccounts/filese...	OK	<a href="#">Operation details</a>
✓ <a href="#">storage21114/default</a>	Microsoft.Storage/storageAccounts/blob...	OK	<a href="#">Operation details</a>
✓ <a href="#">storage21114</a>	Microsoft.Storage/storageAccounts	OK	<a href="#">Operation details</a>

### Next steps

[Go to resource](#)



storage21114 | Queues

Storage account

Search

Overview

Activity log

Tags

Diagnose and solve problems

Access Control (IAM)

+ Queue Refresh Delete Give feedback

Search queues by prefix

Queue

Url

queue1

<https://storage21114.queue.core.windows.net/queue1>

## Creating function in function app: -

### Create function



1 Select a template 2 **Template details**

We need more information to create the function. [Learn more](#)

Job type \*

Create new app

Provide a function name \*

http\_trigger1

Authorization level \*

FUNCTION

Create

Cancel



## Lab- Cloud Computing

Functions Metrics Properties Notifications (0)

+ Create {} Set up local environment Refresh

Filter by name...

Name	Trigger	Status	Monitor
http_trigger1	HTTP	Enabled	Invocations and more

```
1 import azure.functions as func
2 import azure.storage.blob as blob
3
4 def register_child(req: func.HttpRequest) -> func.HttpResponse:
5     ...# Parse request body
6     ...data = req.get_json()
7     ...name = data['name']
8     ...age = data['age']
9     ...photo = data['photo'] ...# Base64 encoded photo
10
11 ...# Store photo in Blob Storage
12 ...blob_service = blob.BlockBlobService(account_name='<storage_account_name>', account_key='<storage_account_key>')
13 ...blob_service.create_blob_from_bytes('<container_name>', f'{name}_photo.jpg', base64.b64decode(photo))
14
```

Result: -

**Welcome to Patient**

[Link to Sign Up](#)

**Create a New Appointment**

Department: Cardiology

Symptoms:

Create Appointment