

**Assignment -3**  
**IBM Object Storage and IBM Watson Assistant**

Assignment Date	28 October 2022
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Maximum Marks	2 Marks

**Question 1:**

Create a Bucket in IBM object storage.

**Solution:**

```
ibmCloudTest.py import ibm_boto3 from ibm_botocore.client
import Config, ClientError from ibm_s3transfer.aspera.manager
import AsperaTransferManager from
ibm_s3transfer.aspera.manager import AsperaConfig from flask
import Flask, render_template, url_for, request, redirect

COS_ENDPOINT="https://s3.jp-tok.cloud-object-storage.appdomain.cloud"
COS_API_KEY_ID="wprEMAxYjHj5sPI959wL_3HJczOWRbYn52XUuLrDSJON"
COS_INSTANCE_CRN="crn:v1:bluemix:public:cloud-object-
storage:global:a/602bcdcf9224f7b8c2e1aed60258292:b846251f-3216-44c8-b123-4e13e3571cda::"

cos = ibm_boto3.resource("s3",
ibm_api_key_id=COS_API_KEY_ID,
ibm_service_instance_id=COS_INSTANCE_CRN,
config=Config(signature_version="oauth"),
endpoint_url=COS_ENDPOINT
)

ms_transfer_config = AsperaConfig(multi_session=2, multi_session_threshold_mb=100)
transfer_manager = AsperaTransferManager(client=client, transfer_config=ms_transfer_config)

app=Flask(__name__)
```

```
bucket_name = "flask-application" download_filename  
= "E:\IMS\static\css\Styles.css" object_name =  
"Styles.css"
```

```
with AsperaTransferManager(client) as transfer_manager:  
    future = transfer_manager.download(bucket_name, object_name, download_filename)  
    future.result()
```

```
def get_item(bucket_name, item_name):  
    print("Retrieving item from bucket: {0}, key: {1}".format(bucket_name, item_name))  
    try:  
        file = cos.Object(bucket_name, item_name).get()  
    print("File Contents: {0}".format(file["Body"].read()))    except  
    ClientError as be:  
        print("CLIENT ERROR: {0}\n".format(be))  
    except Exception as e:  
        print("Unable to retrieve file contents: {0}".format(e))
```

```
def get_bucket_contents(bucket_name):  
    print("Retrieving bucket contents from: {0}".format(bucket_name))  
    try:  
        files = cos.Bucket(bucket_name).objects.all()  
    files_names = []  
        print(files)  
    for file in files:  
        files_names.append(file.key)        print("Item: {0}  
{1} bytes)".format(file.key, file.size))        return  
    files_names    except ClientError as be:  
        print("CLIENT ERROR: {0}\n".format(be))  
    except Exception as e:  
        print("Unable to retrieve bucket contents: {0}".format(e))
```

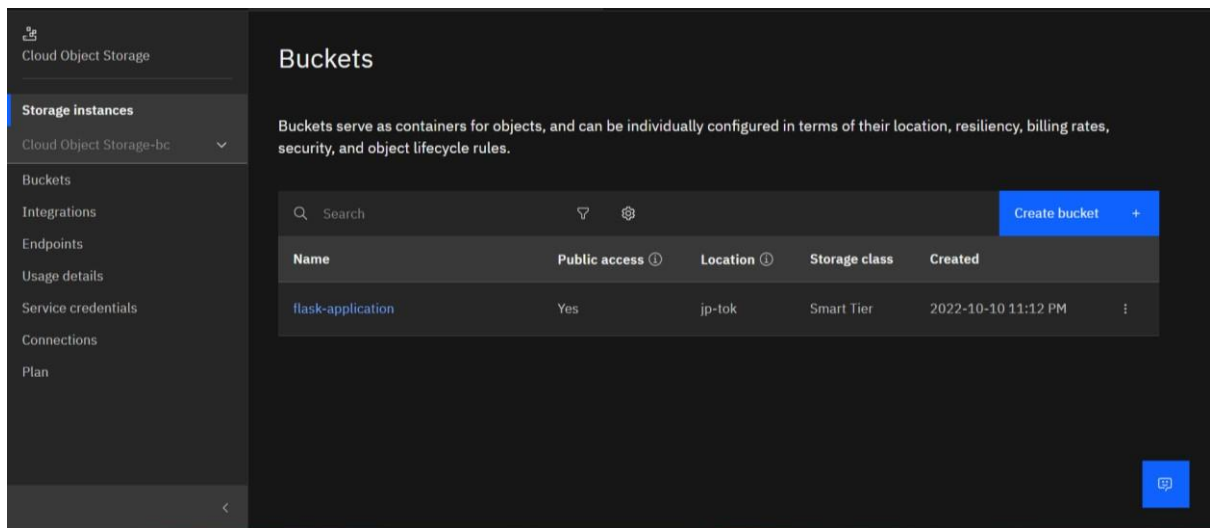
```

@app.route('/') def
index():
    files = get_bucket_contents('flask-application')
    return render_template('index.html', files = files)

if __name__=='__main__':
    app.run(debug=True)

```

### Output:



The screenshot shows the AWS Cloud Object Storage Buckets console. The left sidebar contains a navigation menu with options: Cloud Object Storage, Storage instances, Cloud Object Storage-bc, Buckets, Integrations, Endpoints, Usage details, Service credentials, Connections, and Plan. The main content area is titled 'Buckets' and includes a description: 'Buckets serve as containers for objects, and can be individually configured in terms of their location, resiliency, billing rates, security, and object lifecycle rules.' Below this is a search bar and a 'Create bucket' button. A table lists the existing buckets:

Name	Public access ⓘ	Location ⓘ	Storage class	Created
flask-application	Yes	jp-tok	Smart Tier	2022-10-10 11:12 PM

### Question 2:

Upload 5 images to ibm object storage and make it public. write html code to displaying all the 5 images.

**Solution: index.html**

```
<h1>IBM Cloud Storage and IBM Watson Assistant</h1>
```

```
<br><hr>
```

```
{% block head %}
```

```
<!-- CSS -->
```

```
<link rel="stylesheet" href="{{ url_for('static',filename='css/Styles.css') }}" /> {%
```

```
endblock %}
```

```
<script> window.watsonAssistantChatOptions = { integrationID: "8abe6aef-f2bb-4376-be93-7fda1857ec36", // The ID of this integration. region: "jp-tok", // The region your integration is hosted in. serviceInstanceID: "440aaee1-fbb4-4c2b-8604-cb5d605fa157", // The ID of your service instance.
```

```
  onLoad: function(instance) { instance.render(); }
```

```
};
```

```
setTimeout(function(){ const
```

```
t=document.createElement('script');
```

```
  t.src="https://web-chat.global.assistant.watson.appdomain.cloud/versions/" +  
(window.watsonAssistantChatOptions.clientVersion || 'latest') + "/WatsonAssistantChatEntry.js";
```

```
document.head.appendChild(t);
```

```
});
```

```
</script>
```

```
<!doctype html>
```

```
<html>
```

```
<body>
```

```
{% for row in files %}
```

```
<div style="border: 1px solid #EFEFEF;margin:10px;">
```

```
<h3>Filename : {{row}} </h3>
```

```

        </td>

    </div>

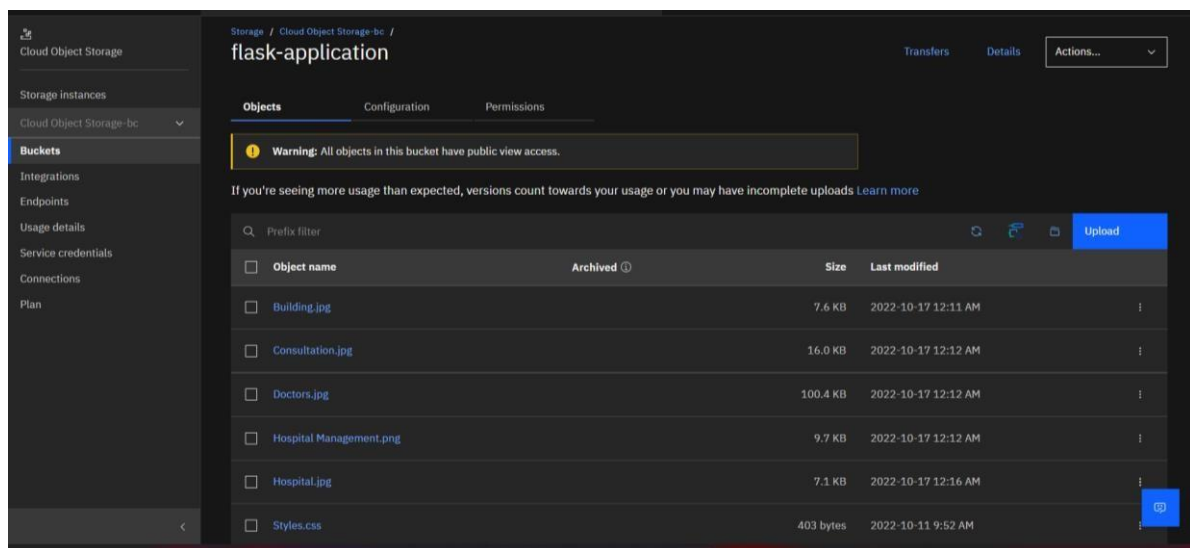
    {% endfor %}

</body>

</html>

```

## Output:



## Question 3:

Upload a css page to the object storage and use the same page in your HTML code.

```
Solution: Styles.css body {
background-color: rgb(190, 229, 247);
text-align: center;  font-style: italic ;
}

.outercont
{
    height: 100vh;  width:
100vw;  display: flex;  flex-
direction: column;  justify-
content: space-around;  align-
items: center;
}

p {  font-size:
20px;
}

h1 {  text-align:
center;  font-style:
normal;
}

h2 {  text-align:
center;
}

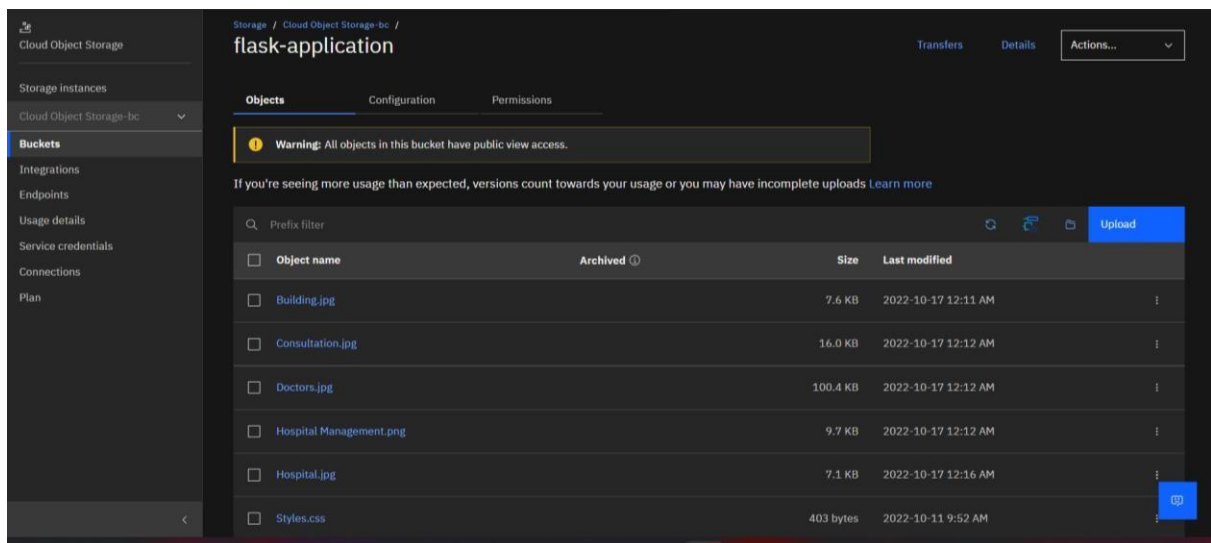
.cont {  width:
700px;
}

.leftcont {  font-
size: 17px;
}

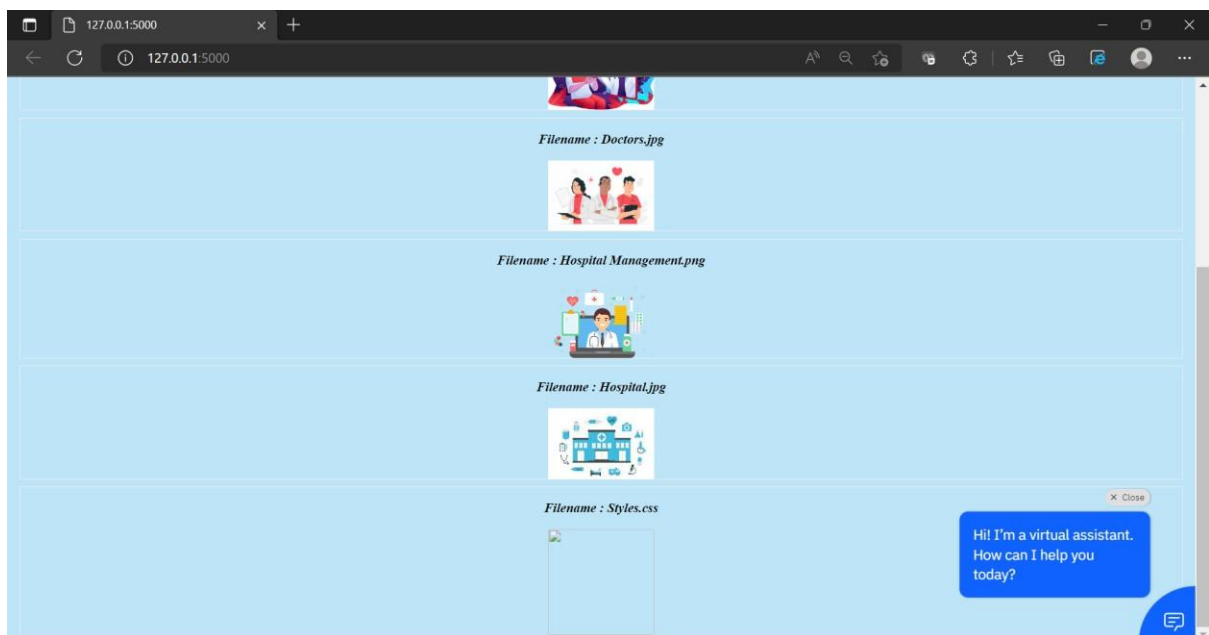
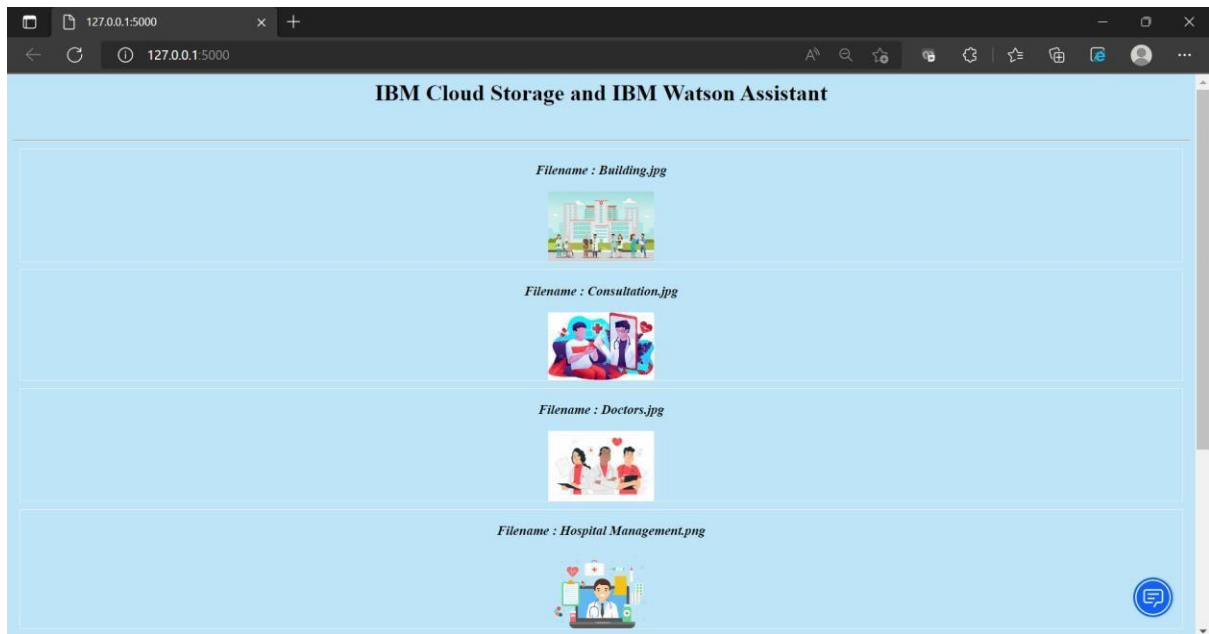
.rightcont {  font-
size: 17px;
}
```

```
.othercont {
  display: flex;
}
```

## Output:



## Web Page:



Question-4:

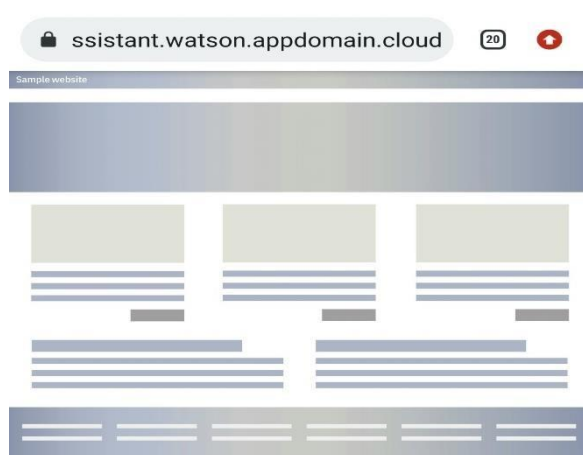


Design a chatbot using IBM Watson assistant for hospital. Ex: User comes with query to know the branches for that hospital in your city. Submit the web URL of that chat bot as a assignment.

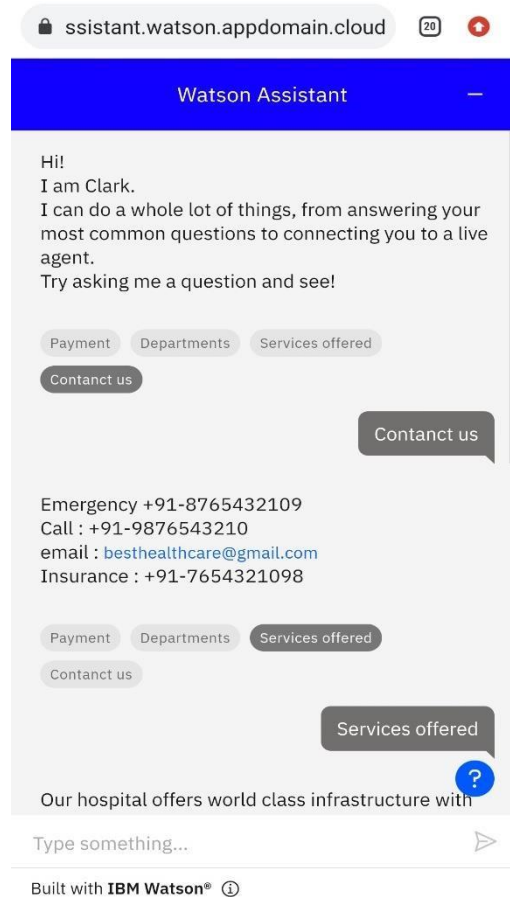
### Solution:

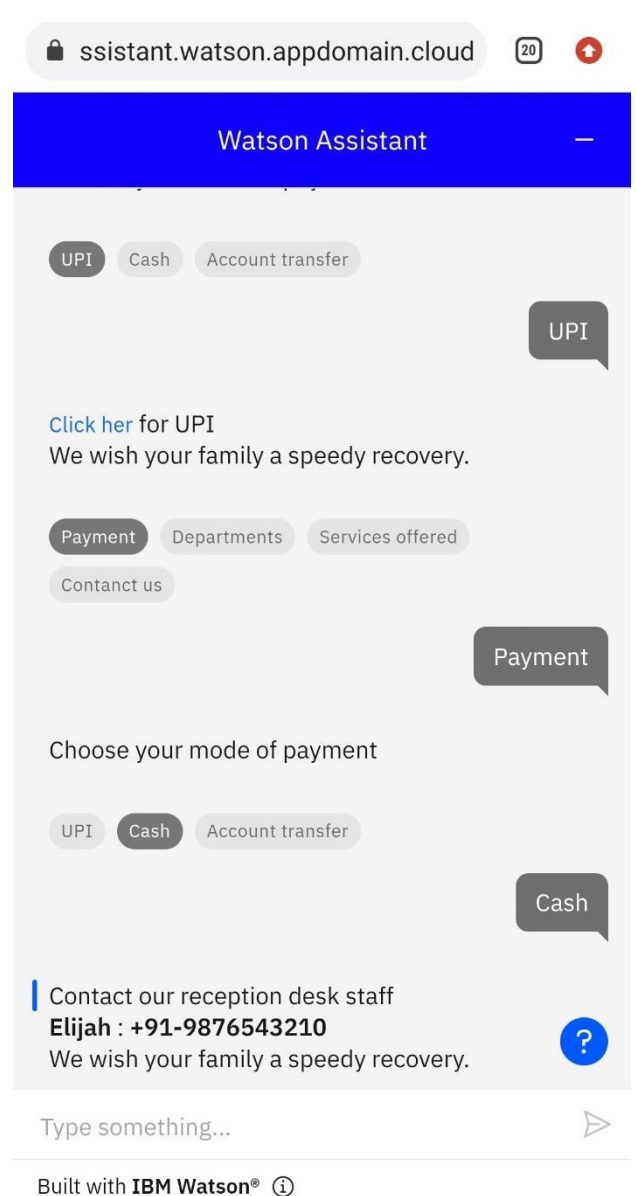
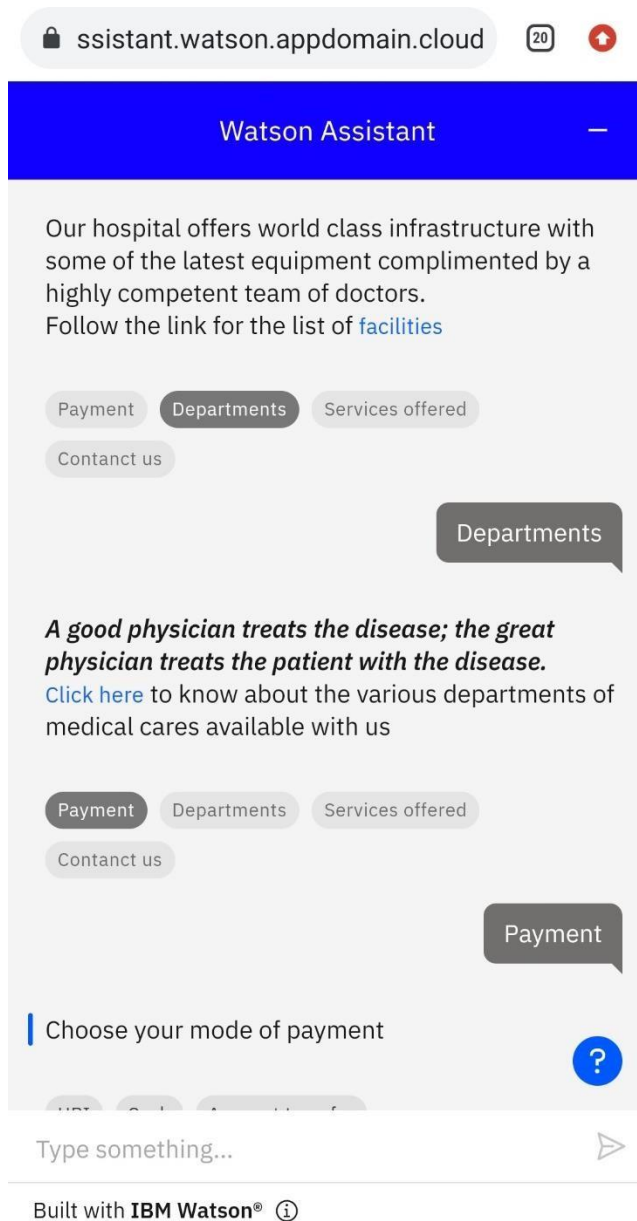
<https://web-chat.global.assistant.watson.appdomain.cloud/preview.html?backgroundImageUrl=https%3A%2F%2Fjp-tok.assistant.watson.cloud.ibm.com%2Fpublic%2Fimages%2Fupx-440aee1-fbb4-4c2b-8604cb5d605fa157%3A%3Affa26b03-3295-42fd-a098-6723615c4e58&integrationID=a3e3b932-8ee443ee-9ccb-f3cfa9687188&region=jp-tok&serviceInstanceID=440aee1-fbb4-4c2b-8604cb5d605fa157>

### Output:



click here





Question-5:

5.Create Watson assistant service with 10 steps and use 3 conditions in it. Load that script in HTML page.

**Solution:**

```
<script> window.watsonAssistantChatOptions = { integrationID: "8abe6aef-f2bb-4376-be93-7fda1857ec36", // The ID of this integration. region: "jp-tok", // The region your integration is hosted in. serviceInstanceID: "440aaee1-fbb4-4c2b-8604-cb5d605fa157", // The ID of your service instance. onLoad: function(instance) { instance.render(); }
};
setTimeout(function(){
  const t=document.createElement('script');
  t.src="https://web-chat.global.assistant.watson.appdomain.cloud/versions/" +
(window.watsonAssistantChatOptions.clientVersion || 'latest') + "/WatsonAssistantChatEntry.js";
document.head.appendChild(t);
});
</script>
```

## Steps:

### Steps in payment

Make a payment

Customer starts with:

Complete payment

Conversation steps

1

Choose your mode of payment

UPI Account tran... + 1

Continue to next step

1 == UPI

[Click her](https://pay.google.com/intl/en\_in/about/) for Step 1 We wish your family a speedy recovery.

Go to action: What can you do?

1 == Account transfer

RTGS Account Number: 1234567890 IFSC code of the Branch :SBIN0981

Go to action: What can you do?

1 == Cash

Contact our reception desk staff Elijah : +91-9876543210 We wish your family a speedy recovery.

New step +

### Steps in location

IBM Watson Assistant Lite Upgrade Clark

Location

Customer starts with:

Can you please give me a list of the types of things you can he...

Conversation steps

1

We have our branch all around the world [Click here] (https://www.google.com/maps/search/best+health+...)

Go to action: What can you do?

New step +

steps in What can you do

What can you do?

### Conversation steps

1 This step has no content

Departments Payment + 2

↓ Continue to next step

1 == Payment

2 This step has no content

Go to action: **Make a payment**

1 == Services offered

3 Our hospital offers world class infrastructure with some of the latest equipment complimented by a...

Re-ask previous step(s)

1 == Departments

4 A good physician treats the disease; the great physician treats the patient with the disease. [Click...

Re-ask previous step(s)

1 == Contact us

5 Emergency +91-8765432109 Call : +91-9876543210 email : besthealthcare@gmail.com...

Re-ask previous step(s)

New step +

### Conditions:

Conditions in payment

- UPI
- Account transfer
- Cash

Step 2 is taken

with conditions

f<sub>x</sub>

Conditions

1 condition

If

All

of this is true:

1. Choose your m...

is

UPI

x

and

Add condition

+

New condition group

+

defined

UPI

Account transfer

Cash

Assistant says

B

I

↻

🔗

📄

🔊

📧

</>

Click [here](#) for 1. Choose your mode of payment

We wish your family a speedy recovery.

Define customer response

▼

And then

Preview

▶

## Conditions in What can you do

- Departments
- Payment
- Services offered
- Contact us

The screenshot displays the IBM Watson Assistant Lite interface, showing a conversation flow for a hospital's services. The interface is divided into two main panels: a left sidebar for conversation steps and a main workspace for defining conditions and actions.

**Left Sidebar (Conversation steps):**

- Customer starts with:** Can you please give me a list of the types of things you can ...
- Conversation steps:**
  - Step 1: This step has no content. Buttons: Departments, Payment, +2. Action: Continue to next step.
  - Step 2: This step has no content. Action: Go to action: Make a payment.
  - Step 3: 1 == Services offered. Content: Our hospital offers world class infrastructure with some of the latest equipment complimented by a... Action: Re-ask previous step(s).
  - Step 4: 1 == Departments. Content: A good physician treats the disease; the great physician treats the patient with the disease. [Click... Action: Re-ask previous step(s).
  - Step 5: 1 == Contact us. Content: Emergency +91-8765432109 Call : +91- 9876543210 email : hesthealthcare@email.com...

**Main Workspace (Step 2 is taken with conditions):**

- Conditions:** 1 condition. If All of this is true:
  - 1. No response is Payment defined.
- Assistant says:** For example: What type of transfer would you like to make?
- Define customer response:** (Empty field)
- And then:** Go to another action. Goes to action: Make a payment.

The interface includes a top navigation bar with "IBM Watson Assistant Lite", "Upgrade", and "Clark" options. A "Preview" button is located at the bottom right.



## Output:

