

DAILY ASSESSMENT FORMAT

Date:	25-05-2020	Name:	Neha T
Course:	Signals and Systems	USN:	4AL18EC035
Topic:	1.Fourier Transform 2.Z-Transform	Semester & Section:	4th sem A sec
Github Repository:	Neha-T		

FORENOON SESSION DETAILS

Image of session

The screenshot shows a YouTube video player. The video title is "Fourier Series and Gibbs Phenomena [Python]". The video content shows a man explaining the Gibbs phenomenon. He is using a plot of a square wave and its Fourier series approximation. The plot shows the overshoot of the series near the discontinuity. The video has 2,519 views and was uploaded on Mar 15, 2020.

The screenshot shows a YouTube video player. The video title is "Lecture 45- Applications of Z- transforms - I". The video content shows a man writing on a whiteboard. He is explaining the Z-transform of a sequence and its application in solving difference equations. The video has 3,500 views and was uploaded on Mar 16, 2017.

Report – Report can be typed or handwritten for up to two pages.

➤ **Fourier series and Gibbs Phenomena using Python**

- What can go wrong
 - ★ Discontinuous - real problem for the Fourier serie

➤ **Fourier Transform**

- How we generalise from periodic functions to the fourier transform which is defined on an infinite domain

➤ **The Fourier Transform and derivatives**

- Method of approximating a continuous function $f(x)$
- Can use that either to approximate derivatives numerically very accurately or can also use to transform from Partial Differential Equation into Ordinary Differential Equation

➤ **Fourier Transform and Convolution integrals**

- If we have two functions f and g then if we Fourier transform the convolution it just becomes the product in the Fourier transform domain
- Convolution becomes the product in the Fourier transform that is very useful

➤ **Institute of Fourier transform and Laplace transform**

➤ **Laplace transform of First Order**

- $f(t) \rightarrow F(s)$
- $y(t) \rightarrow Y(s)$
- When we take the derivative of a function we multiply its Laplace transform by s that's the rule
- If we have two derivatives we multiply it by square of s
- Changed from t time in Differential Equation to s in the Laplace transform

➤ **Implementation of Laplace Transform using Matlab**

➤ **Application of z-transform**

- Difference equation
- Order if Differential Equation
- Solution of Differential Equation
 - ★ General solution
 - ★ Particular solution
- Linear Differential Equation with constant coefficient

- **Properties**

- **Finding the z-transform of sequence using Matlab**

Date: 25-05-2020

Course: Python

Topic: Build a personal website with Python
and Flask

Name: Neha T

USN: 4AL18EC035

Semester 4TH sem A sec
& Section:

AFTERNOON SESSION DETAILS	
Image of session	

Odey

The Python Mega Course: Build 10 Real World Applications

Your progress

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Course content

158. Your First Website

8 min

159. HTML Templates

4 min

Resources

160. Navigation Menu

9 min

Resources

161. Note on Browser Caching

1 min

162. CSS Styling

6 min

Resources

163. Creating a Python Virtual Environment

6 min

script.py C:\git\demo_flask_app\demo - Atom

File Edit View Selection Find Package Help

script.py

```
<!-- script -->

from flask import Flask

app = Flask(__name__)

@app.route("/")
def home():
    return "Hello! content goes here!"

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

Run

Output

```
ages (from flask)
Requirement already satisfied (use --upgrade to upgrade): itsdangerous<0.21 in c:\users\admin\appdata\local\programs\python\python351\bi
to packages (from flask)
Requirement already satisfied (use --upgrade to upgrade): MarkupSafe in c:\users\admin\appdata\local\programs\python\python351\site-packa
ges (from Jinja2>=>2.8.0)
Installing collected packages: flask
Running setup.py install for flask
Successfully installed flask-0.10.1

PS C:\git\demo_flask_app\demo python .\script.py

* Recreating with start
* Debugger is active
* Debugger pin code: 231-698-885
127.0.0.1 - - [15/Dec/2015 22:24:12] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [15/Dec/2015 22:24:12] "GET /favicon.ico HTTP/1.1" 404 -
```

Overview

Q&A

Bookmarks

Announcements

[illegible]

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➤ **Build a Personal Website with Python and Flask**

- **Flask is a great Python framework for building web applications and it is very easy to learn. Flask web framework and you will build a website from scratch**
- **Briefed about how the output will look like**
- **First website**
- **HTML Templates**
 - ★ **We don't have plain text, but text with various formats. That is made possible by returning an HTML template instead of a plain Python string.**
- **Navigation Menu**
 - ★ **We need to add a menu so that user can easily navigate through the webpages by just clicking their links**
- **CSS Styling**
 - ★ **So far our website consists of a Python script and HTML documents**
 - ★ **Now we need to add some style formatting to the HTML structure using CSS. That is done by creating CSS file and connecting it to our HTML files**
 - ★ **CSS is a style language that like HTML it is also very easy to learn**
 - ★ **CSS stylesheets are considered static files**