

```
In [9]: %%writefile 1_hello.py
import streamlit as st
st.set_page_config(page_title='Hello Streamlit',page_icon='😎',layout='wide')
st.title('Welcome to Streamlit')

st.header('This is header')
st.subheader('This is subheader')
st.text('st.text() is used for simple fixed width text')
st.write('st.write() is more flexible and can display and can display text,number,dataframe')
st.markdown('**st.markdown()** lets you use markdown for **rich text**')

code_example="""
def add(a,b):
    return a+b
result=add(5,7)
print(result)
"""

st.code(code_example,language='python')
```

Overwriting 1\_hello.py

```
In [16]: %%writefile 2_layout_basics.py
import streamlit as st
st.set_page_config(page_title='Faculty Profile',page_icon='👤',layout='wide')
st.title('Faculty Profile Demo')

st.markdown('This example shows how to use **sidebar**,**columns** and **expander**')

st.sidebar.header('Profile settings')
faculty_name=st.sidebar.text_input('Faculty Name','tejas Thakker')
department=st.sidebar.selectbox('department',['CE','IT','CSE','AIML'])
experiance=st.sidebar.slider('Years of experiance',0,40,10)

st.sidebar.markdown('---')
st.sidebar.write('You can put filter,toggles etc in sidebar')

col1,col2=st.columns([1,2])

with col1:
    st.subheader('Basic Info')
    st.write(f"**Name:** {faculty_name}")
    st.write(f"**Department:** {department}")
    st.write(f"**Experience:** {experiance} year")
with col2:
    st.subheader('About')
    st.markdown('')
    use this area to show detailed information about the facult member such as research
    interest,publication and courses
    ''')

with st.expander('show Courses handled'):
    st.write('python-1')
    st.write('python-2')
    st.write('DE')
    st.write('PS')

with st.expander('show publications'):
    st.write("1.paper A(2024)")
    st.write('2.paper B(2025)')
```

Overwriting 2\_layout\_basics.py

## Part 2

### Text Input

```
In [18]: %%writefile 3_text_input.py
import streamlit as st
st.set_page_config(page_title='Faculty Profile',page_icon='👤',layout='wide')
st.title('Faculty Profile Demo')
name=st.text_input('Enter your Name:')
comments=st.text_area('Any comments or feedback ?')

st.write('**Live Output**')

if name:
    st.write(f'Hello,**{name}** 🙋')
if comments:
    st.write('Your comments:')
    st.write(comments)
```

Overwriting 3\_text\_input.py

### Number Input & slider

```
In [20]: %%writefile 4_number_input.py
import streamlit as st

st.title('Number Input & slider')
age=st.number_input('Enter your Age:',min_value=0,max_value=100,value=25)
rating =st.slider('Rate this Session(1-10):',min_value=1,max_value=10,value=3)
st.write(f'**your ageis:** {age}')
st.write(f'**rating:** {rating}')
```

Overwriting 4\_number\_input.py

### Selection Widgets

```
In [1]: %%writefile 5_Selection_Widgets.py
import streamlit as st
st.title('Selection Widget Demo')
course = st.selectbox('Select Course:',['Python','Fsd','PS','DE'])
preferred_days=st.multiselect('Preferred Days for extra lect',['mon','tus','wed','thu',

delievery_mode=st.radio('Dilievery Mode',['offline','online','hybrid'])

subscribe =st.checkbox('checkbox')
st.write('---')
st.write(f'**Course:** {course}')
st.write(f"**Prefurred Days** {' '.join(preferred_days) if preferred_days else 'None'}")
st.write(f"**Dilievery Mode:** {delievery_mode}")
st.write(f"**sub** {subscribe}")
```

Overwriting 5\_Selection\_Widgets.py

```
In [17]: %%writefile 6_Notice.py
import streamlit as st
from datetime import date
st.set_page_config(page_title='Notic Board',page_icon='📌',layout='wide')

st.title('Selection Widget Demo')
st.sidebar.header('Filter Notices')
select=st.sidebar.selectbox('category',['All','exams','workshops','Internship'])
show_past =st.sidebar.checkbox('Show Past Notice',value=True)

notices=[
    {'title':'T4 exam schedule','category':'exam','date':date(2026,1,1)},
    {'title':'python workshop','category':'workshop','date':date(2026,1,5)},
    {'title':'Internship','category':'Internship','date':date(2026,1,3)}]

st.header('Notices')
col1,col2=st.columns([1,2])

with col1:
    st.subheader('Filter Applied')
    st.write(f'category **{select}**')
    st.write(f"past notice :{show_past}")
with col2:
    st.subheader('Information')
    st.write('Below are some notice')

for notice in notices:
    if select != 'All' and notice['category'] !=select:
        continue
    with st.expander(f"{notice['title']} {notice['category']}"):
        st.write(f"{notice['date']}")
```

Overwriting 6\_Notice.py

```
In [21]: %%writefile 7_date_time_file.py
import streamlit as st
from datetime import date,time

st.title('Date,Time T file uploader')

exam_date =st.date_input('Select exam date:',value=date.today())
start_time=st.time_input('Exam Start Time:', value=time(9,0))

upload=st.file_uploader('Upload CSV file',type=['csv'])
st.write(f"Selected Exam Date: {exam_date}")
st.write(start_time)

if upload is not None:
    st.success('File Uploaded')
    st.write(upload.name)
    st.write(upload.type)
```

Overwriting 7\_date\_time\_file.py

## Example Button & Download button

```
In [26]: %%writefile 8_button_demo.py
import streamlit as st
import pandas as pd

st.title('Button')
if st.button('Click to generate Sample Date'):
    df=pd.DataFrame({
        'Enrollment No':[1,2,3,4,5],
        'Marks':[78,79,80,45,21]
    })
    st.write('Generated Data')
    st.dataframe(df)
    csv=df.to_csv(index=False).encode('utf-8')
    st.download_button(label='Download as CSV',data=csv,file_name='sample.csv',mime='text/csv')
```

Overwriting 8\_button\_demo.py

## Output display & Matplotlib

### Example-Dataframe,Table,JSON

```
In [28]: %%writefile 9_display_data.py
import streamlit as st
import pandas as pd

st.title('Data')

data={
    'Student':['A','B','C','D'],
    'Marks':[85,92,76,24],
    'Passed':[True,True,True,False]
}

df=pd.DataFrame(data)
st.subheader('datafreamework')
st.dataframe(df)

st.subheader('st.tsble(static)')
st.table(df)

st.subheader('json')
st.json(data)
```

Overwriting 9\_display\_data.py

## Media Display

```
In [31]: %%writefile 10_Media.py
import streamlit as st
import pandas as pd

st.title('Media')

st.subheader('Image example')
```

```
st.image('C:\\Users\\LJENG\\Downloads\\python.jpg',use_container_width=True)

st.subheader('Audio Example')
st.audio('C:\\Users\\LJENG\\Downloads\\sampleaudio.mp3')

st.header('Video')
st.video('C:\\Users\\LJENG\\Downloads\\samplevideo.mp4')
```

Overwriting 10\_Media.py

In [ ]:

```
In [35]: %%writefile 11_Media.py
import streamlit as st
import time

st.title('Status Element Demo')

st.success('success')
st.warning('warning')
st.error('error Message')
st.info('information')

st.write('---')

st.subheader('Progress & spinner Example')
if st.button('start Long task'):
    progress =st.progress(0)
    with st.spinner('Processing.....'):
        for i in range(100):
            time.sleep(0.03)
            progress.progress(i+1)
    st.success('Task Completed')
```

Overwriting 11\_Media.py

```
In [41]: %%writefile 12_matplotlib.py
import streamlit as st
import matplotlib.pyplot as plt
import numpy as np

st.title('Matplotlib + Strimlit')
x=np.arange(1,11)
y=np.random.randint(50,100,size=10)

st.subheader('Line chart')
plt.figure(figsize=(6,4))
plt.plot(x,y,marker='o')
st.pyplot(plt)
```

Overwriting 12\_matplotlib.py

In [ ]: