ASSIGNMENT

NAME : SRAVANI

HALLTICKET : 2303A510G7

BATCH : 30

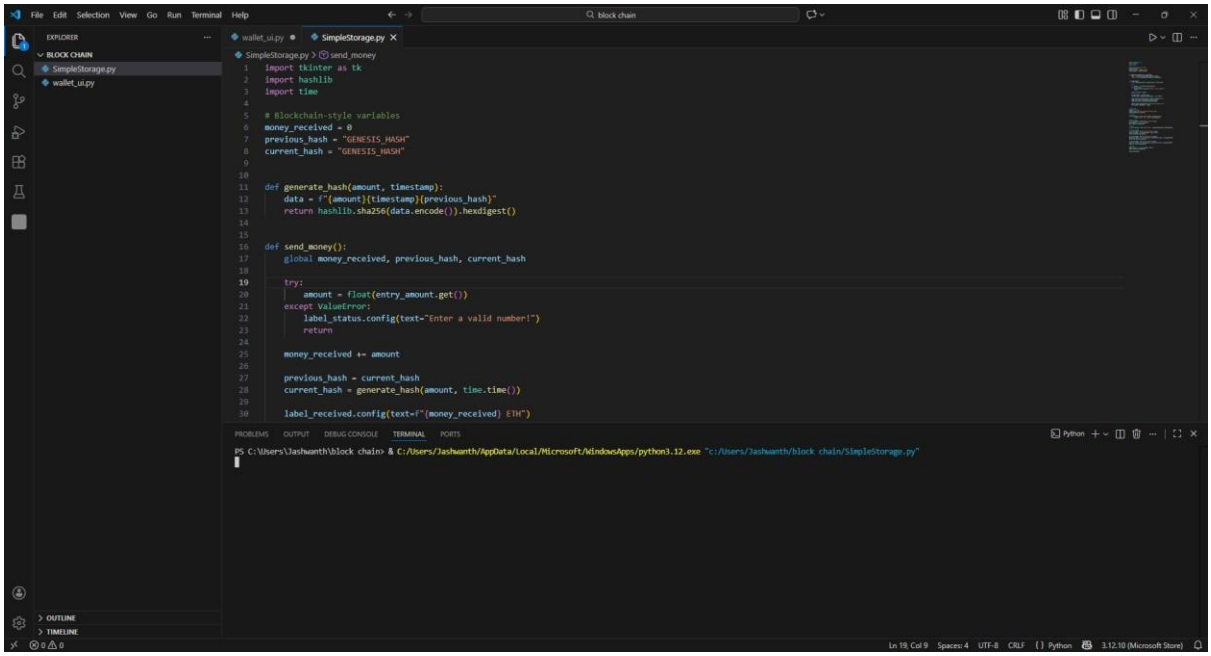
CODE:

```
import tkinter as tk
import hashlib import
time

# Blockchain-style variables
money_received = 0 previous_hash
= "GENESIS_HASH" current_hash =
"GENESIS_HASH"

def generate_hash(amount, timestamp):
    data = f"{amount}{timestamp}{previous_hash}"
return hashlib.sha256(data.encode()).hexdigest()

def send_money():
    global money_received, previous_hash, current_hash

    try:
        amount = float(entry_amount.get())
except ValueError:
```

```
        label_status.config(text="Enter a valid number!")
return

    money_received += amount

    previous_hash = current_hash     current_hash =
generate_hash(amount, time.time())

    label_received.config(text=f"{money_received} ETH")
label_prev_hash.config(text=previous_hash)
label_curr_hash.config(text=current_hash)

    label_status.config(text="Transaction Successful  ")     entry_amount.delete(0,
tk.END)

# GUI Window window = tk.Tk()
window.title("Simple Storage Blockchain App")
window.geometry("450x500")

# Heading tk.Label(window, text="SMART STORAGE
BLOCKCHAIN APP",
        font=("Arial", 14, "bold")).pack(pady=10)

# Money input tk.Label(window, text="Money to
Send").pack() entry_amount = tk.Entry(window)
entry_amount.pack(pady=5)
```

```
# Button
tk.Button(window, text="Send Money", command=send_money).pack(pady=10)

# Display fields tk.Label(window, text="Received

Money").pack() label_received = tk.Label(window,

text="0 ETH") label_received.pack(pady=5)

tk.Label(window, text="Previous Hash").pack() label_prev_hash =

tk.Label(window, text=previous_hash, wraplength=400)

label_prev_hash.pack(pady=5)

tk.Label(window, text="Current Hash").pack() label_curr_hash =

tk.Label(window, text=current_hash, wraplength=400)

label_curr_hash.pack(pady=5)

# Status label_status = tk.Label(window,

text="") label_status.pack(pady=10)

window.mainloop()
```

OUTPUT:


File Edit Selection View Go Run Terminal Help
block chain
EXPLORER
BLOCK CHAIN
SimpleStorage.py
wallet_ui.py
wallet_ui.py
SimpleStorage.py
SimpleStorage.py > send_money
import tkinter as tk
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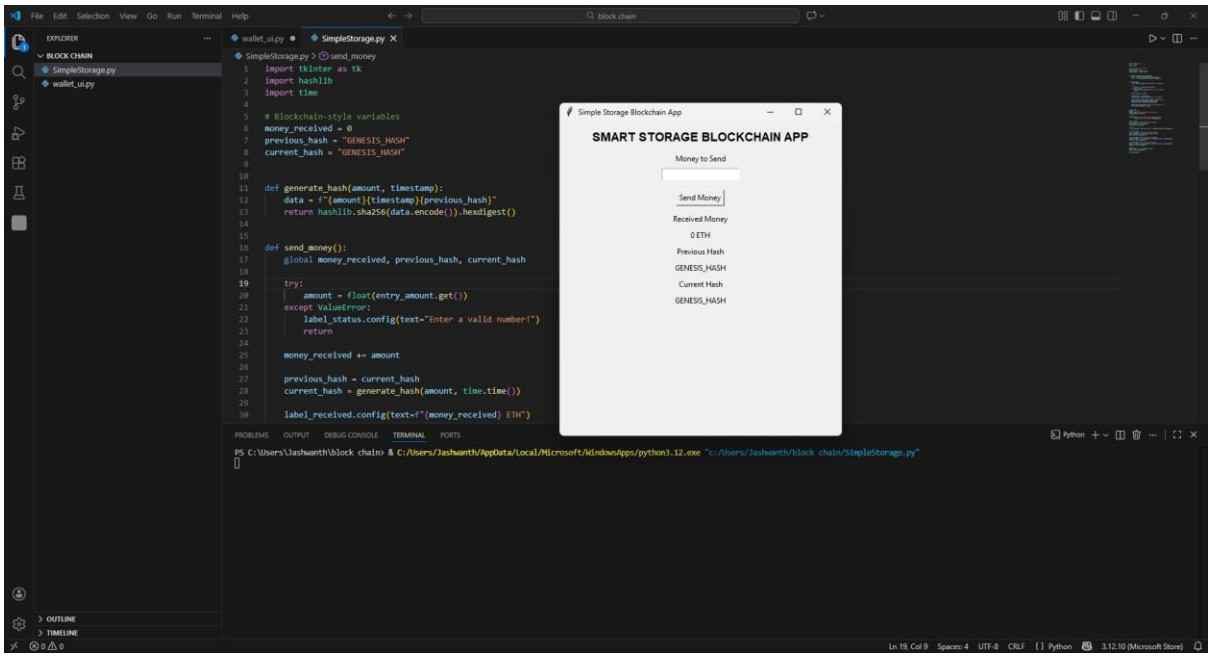
def send_money():
global money_received, previous_hash, current_hash
try:
amount = float(entry_amount.get())
except ValueError:
label_status.config(text="Enter a valid number!")
return
money_received += amount
previous_hash = current_hash
current_hash = generate_hash(amount, time.time())
label_received.config(text=f"{money_received} ETH")
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
Python
PS C:\Users\Jashwanth\block chain> & C:/Users/Jashwanth/AppData/Local/Microsoft/WindowsApps/python3.12.exe "c:/Users/Jashwanth/block chain/SimpleStorage.py"
OUTLINE
TIMELINE
Ln 19, Col 9 Spaces: 4 UTF-8 CRLF { } Python 3.12.10 (Microsoft Store)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money_received += amount
previous_hash = current_hash
current_hash = generate_hash(amount, time.time())
label_received.config(text=f"{money_received} ETH")
Simple Storage Blockchain App
SMART STORAGE BLOCKCHAIN APP
Money to Send
Send Money
Received Money
0 ETH
Previous Hash
GENESIS_HASH
Current Hash
GENESIS_HASH
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
Python
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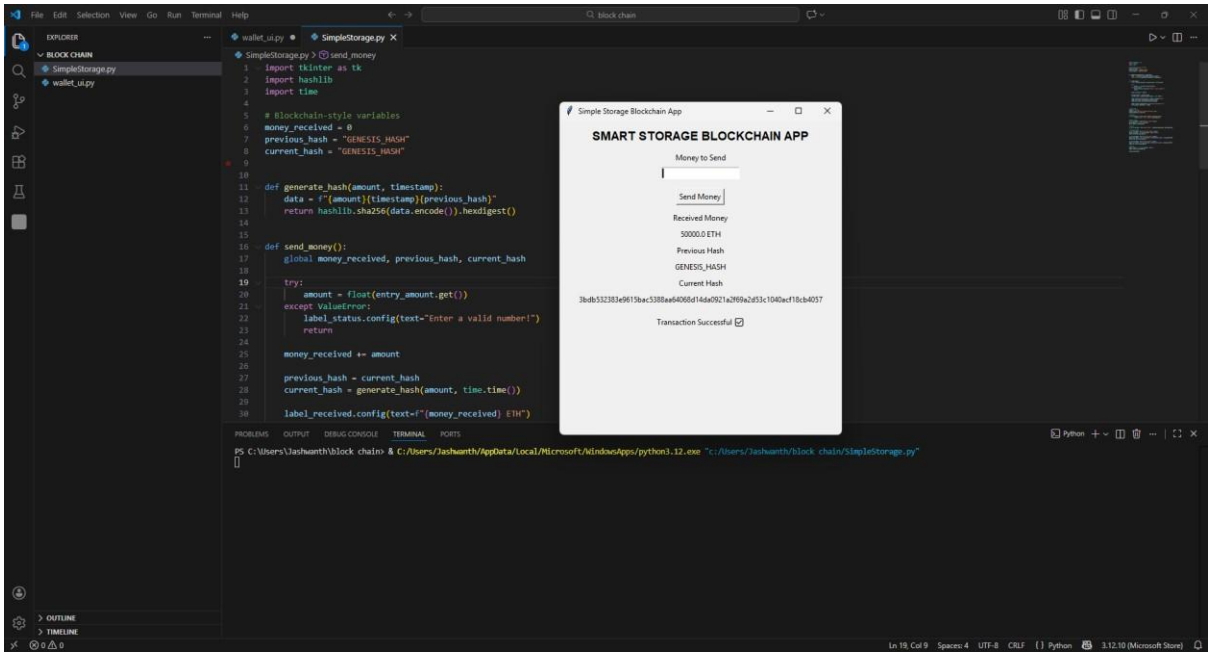
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money_received += amount
previous_hash = current_hash
current_hash = generate_hash(amount, time.time())
label_received.config(text=f"{money_received} ETH")
Simple Storage Blockchain App
SMART STORAGE BLOCKCHAIN APP
Money to Send
Send Money
Received Money
50000.0 ETH
Previous Hash
GENESIS_HASH
Current Hash
3bdb532383e9615bac5388aa64068d14da0921a2f69a2d53c1040acf18cb4057
Transaction Successful
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
Python
PS C:\Users\Jashwanth\block chain> & C:/Users/Jashwanth/AppData/Local/Microsoft/WindowsApps/python3.12.exe "c:/Users/Jashwanth/block chain/SimpleStorage.py"
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