**PF Lab**

**27/8/2024**

**Task 1:**

**FLOWCHART**

**“Item is not in stock”**

A

BankBal < Total Amount

**END**

“Order Placed”

Confirm Order

“Bank Balance Insufficient”

**Verify Payment\_Details**

**TotalAmount = NumItem\*ItemAmount**

A

**Item in stock?**

**READ Order**

**START**

**TASK 2: PSEUDOCODE**

**1.**

START

INPUT num1

SET remainder AS num1 mod 5

IF remainder = 0 THEN

PRINT “The number is a multiple of 5”

ELSE

PRINT “The number isn’t a multiple of 5”

END

**2.**

START

INPUT character

IF character >= ‘a’ AND character <= ‘z’ THEN

PRINT “The character entered is lowercase”

ELSE IF character >= ‘A’ AND character <= ‘B’

PRINT “The character entered is uppercase”

END

**3.**

START

INPUT num1

INPUT num2

INPUT operator

SET result as 0

IF operator = ‘+’ THEN

result = num1 + num2

ELSE IF operator = ‘\*’ THEN

result = num1\*num2

PRINT result

END

**4.**

START

INPUT x

IF x = 0 THEN

PRINT “The number entered is 0”

ELSE IF x > 0 THEN

PRINT “The number entered is positive”

ELSE

PRINT “The number entered is negative”

END

**5.**

START

INPUT age

IF age >= 13 AND age <= 19 THEN

PRINT “The person is a teenager”  
ELSE

PRINT “The person is not a teenager”

END

**TASK 3: Algorithms**

**1.**

1. Ask the user to enter **Year**

2. Set **rem4** to (**Year % 4)**

3. Set **rem100** to (**Year % 100)**

4. Set **rem400** to **(Year % 400)**

5. If ((rem4 = 0 and rem100 != 0) or rem400 = 0) Do Step 6 otherwise Do Step 7

6. Display “The year entered is a leap year”

7. Display “The year entered is not a leap year”

**2.**

1. Ask the user to enter **Word**

2. Make **countChar** for each letter from a to z

3. Set **len =** **Length of** **Word**

4. Set **i = 0**

5. Repeat steps 6,7,8 until **i <= len**

6. Set character = **Word(i)**

7. Increment countChar for that character by 1 for each occurrence of that character

8. **i = i + 1**

9. Display character and countChar wherever **countChar != 0**

**3.**

1. Ask the user to enter **x**

2. Ask the user to enter **y**

3. Set **z = 1**

4. Repeat Steps 5,6 until z <= y

5. Set **x = x\*x**

6. **z = z + 1**

7. Display x

**4.**

1. Ask the user to enter **r**

2. Set **Area** to **(3.14 \* r \* r)**

3. Display Area

**5.**

1. Ask the use to enter **num1**

2. Ask the user to enter **num2**

3. Ask the user to enter **num3**

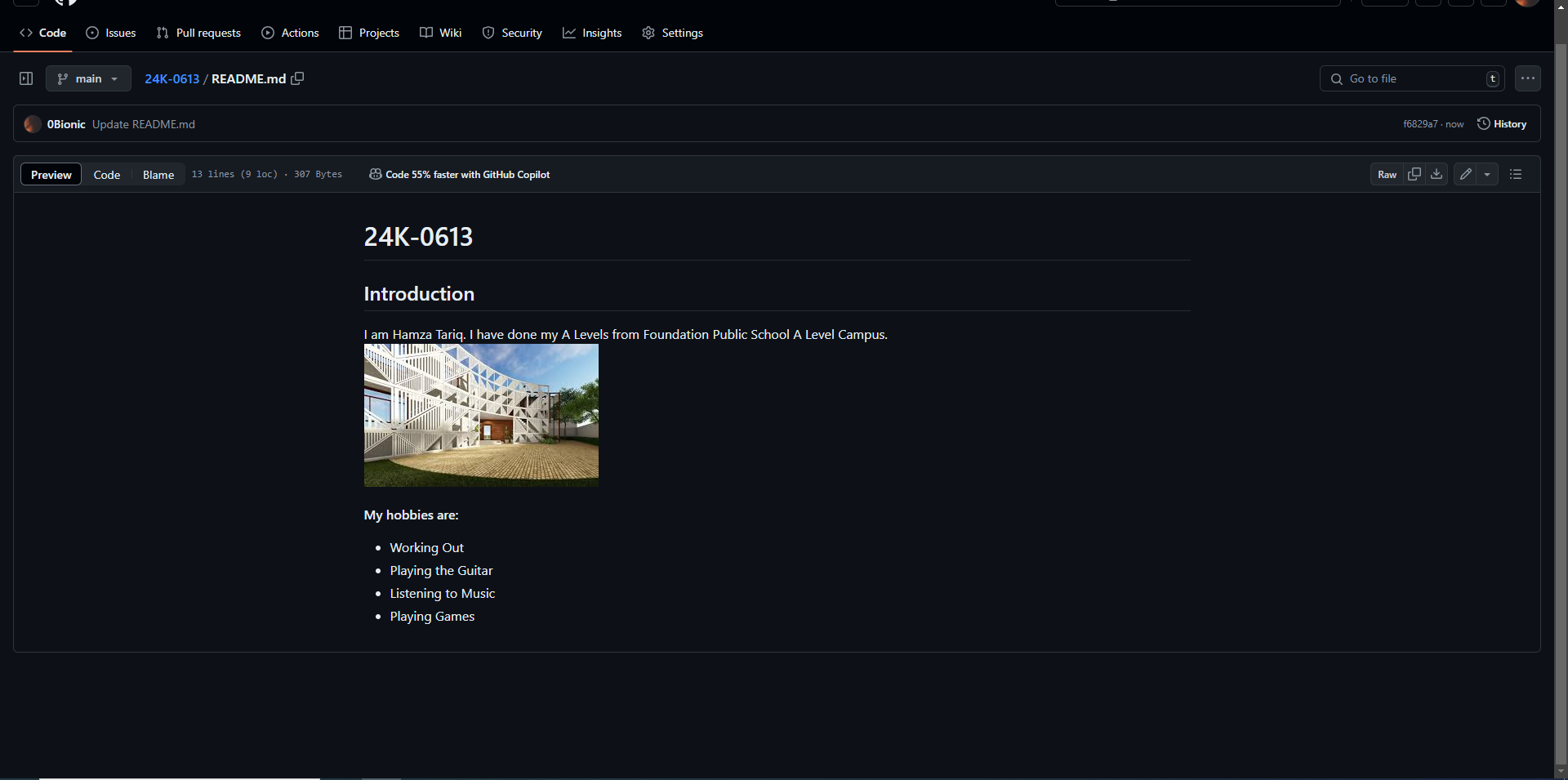
4. If **num1 > num2**, swap **num1** and **num2**

5. If **num2 > num3**, swap **num2** and **num3**

6. If **num1 > num2**, swap **num1** and **num2**

7. Display **num2**

**TASK 4: GitHub**

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