



## Digital Design Verification

**Assignment # 02**

**LOOPS**

**Submitted by:**

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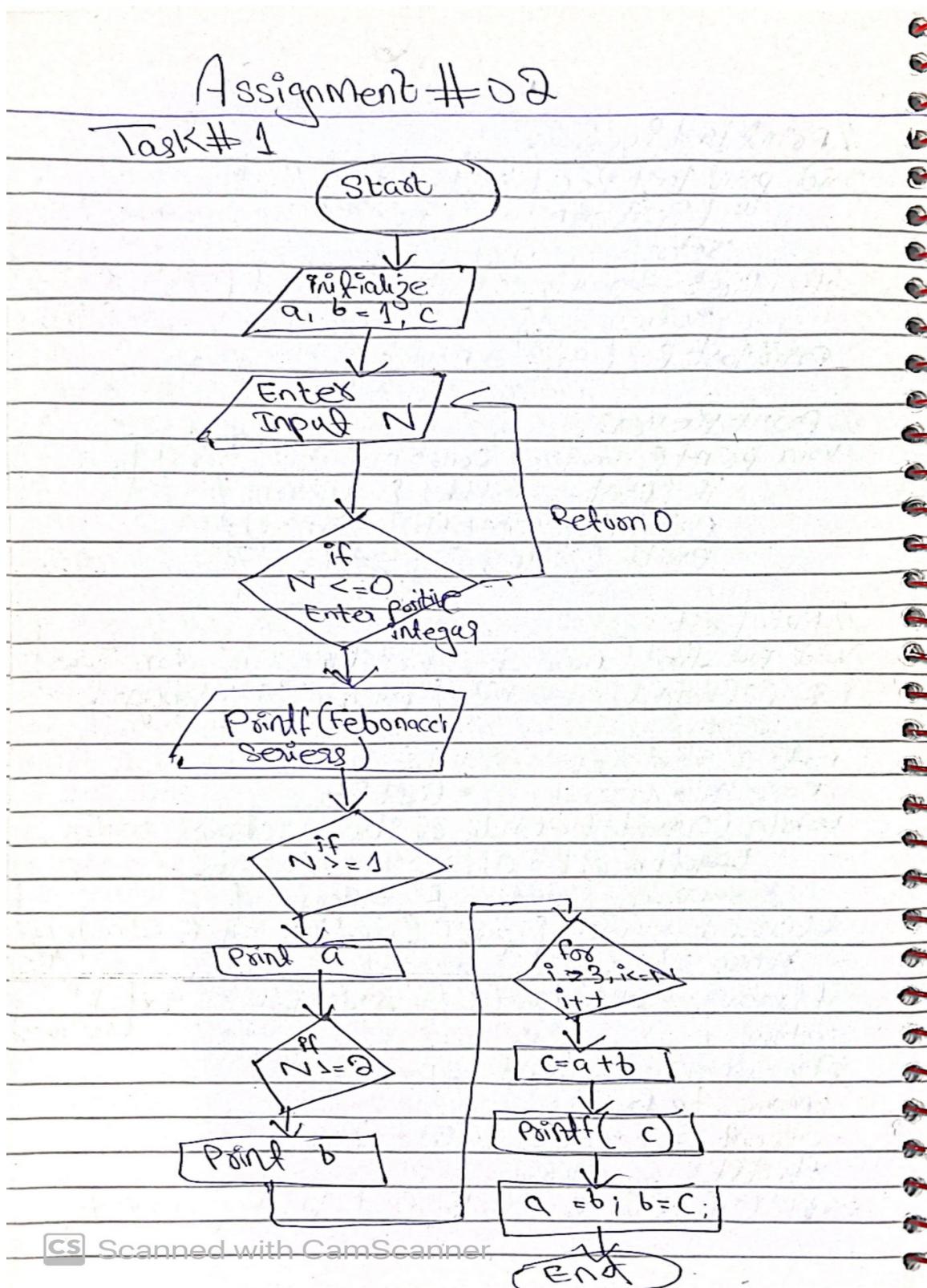
**Date:**  
July 25, 2025

**NUST Chip Design Centre (NCDC), Islamabad, Pakistan**



## TASK # 01:

Flow Chart:



CS Scanned with CamScanner



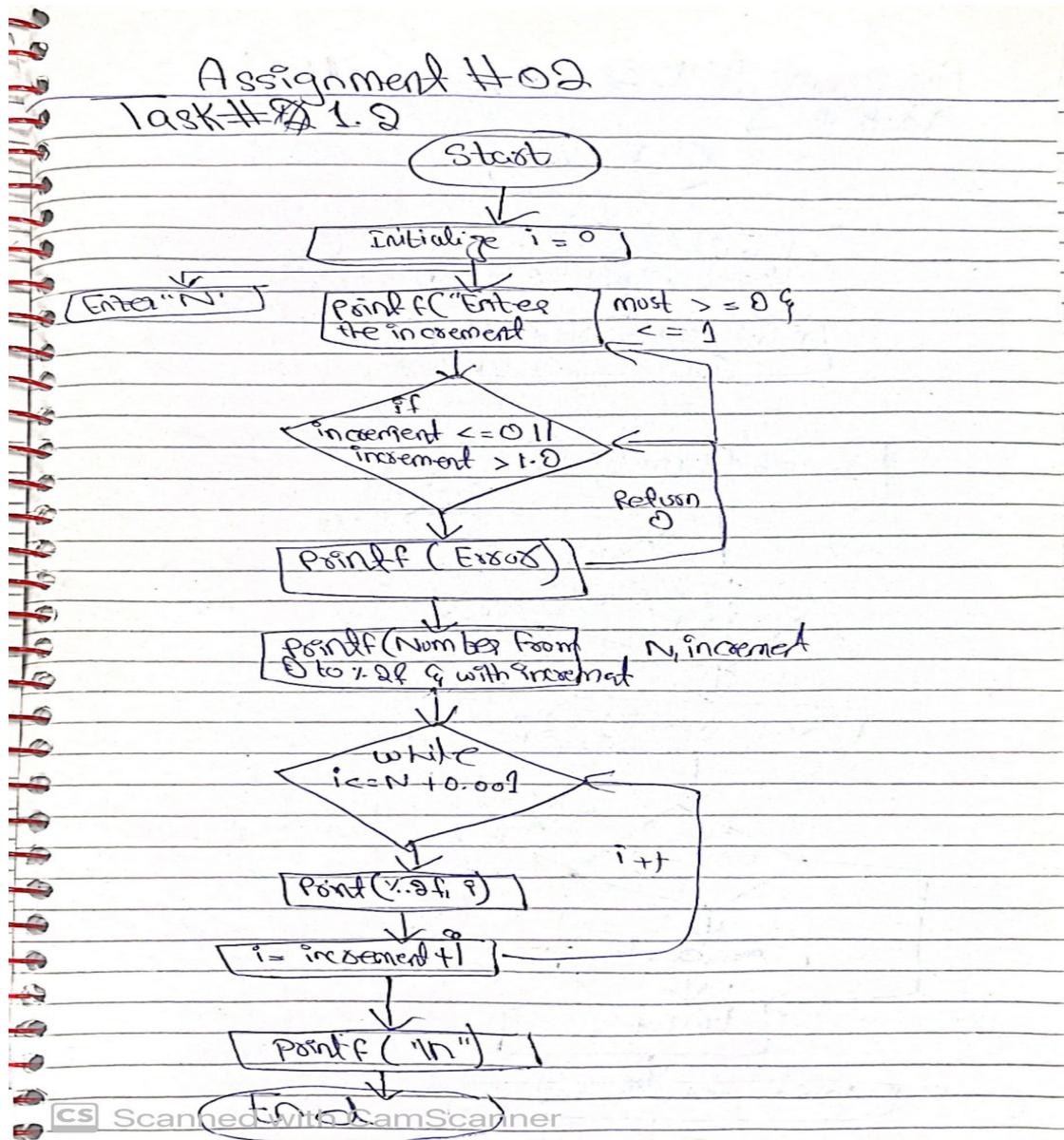
## Terminal output:

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

• khalilrehman@khalilrehman-ThinkPad-T14-Gen-1:~/Documents/Assignment#02$ gcc task1.c -o task1
• khalilrehman@khalilrehman-ThinkPad-T14-Gen-1:~/Documents/Assignment#02$ ./task1
Enter the number of terms: 5
○ Fibonacci Series: 0 1 1 2 3 khalilrehman@khalilrehman-ThinkPad-T14-Gen-1:~/Documents/Assignment#02$ █
```

## TASK#1 B

### Flow Chart:





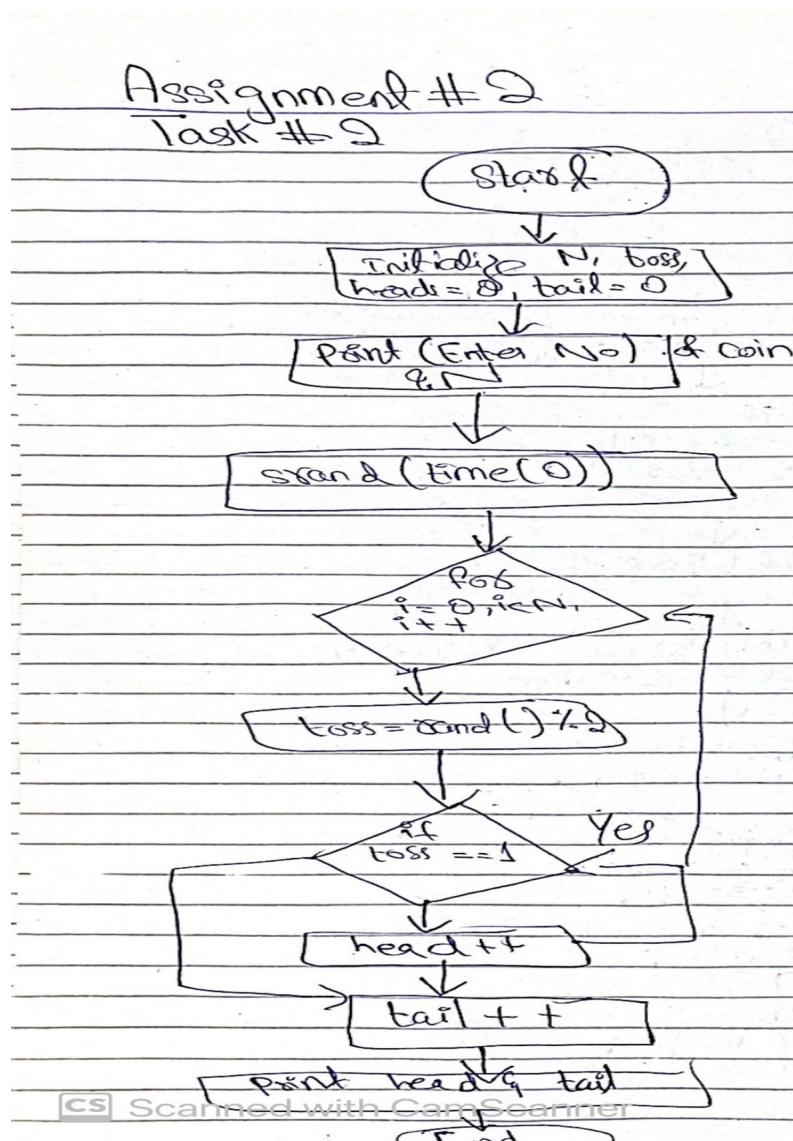
## Terminal Output:

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

● khalilrehman@khalilrehman-ThinkPad-T14-Gen-1:~/Documents/Assignment#02$ gcc task1_2.c -o task1_2
● khalilrehman@khalilrehman-ThinkPad-T14-Gen-1:~/Documents/Assignment#02$ ./task1_2
Enter the limit N: 3
Enter the increment (must be > 0 and <= 1): 0.2
Numbers from 0 to 3.00 with increment 0.20:
0.00 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.20 2.40 2.60 2.80 3.00
○ khalilrehman@khalilrehman-ThinkPad-T14-Gen-1:~/Documents/Assignment#02$ █
```

## TASK # 02:

### FlowChart:



## TERMINAL OUTPUT:

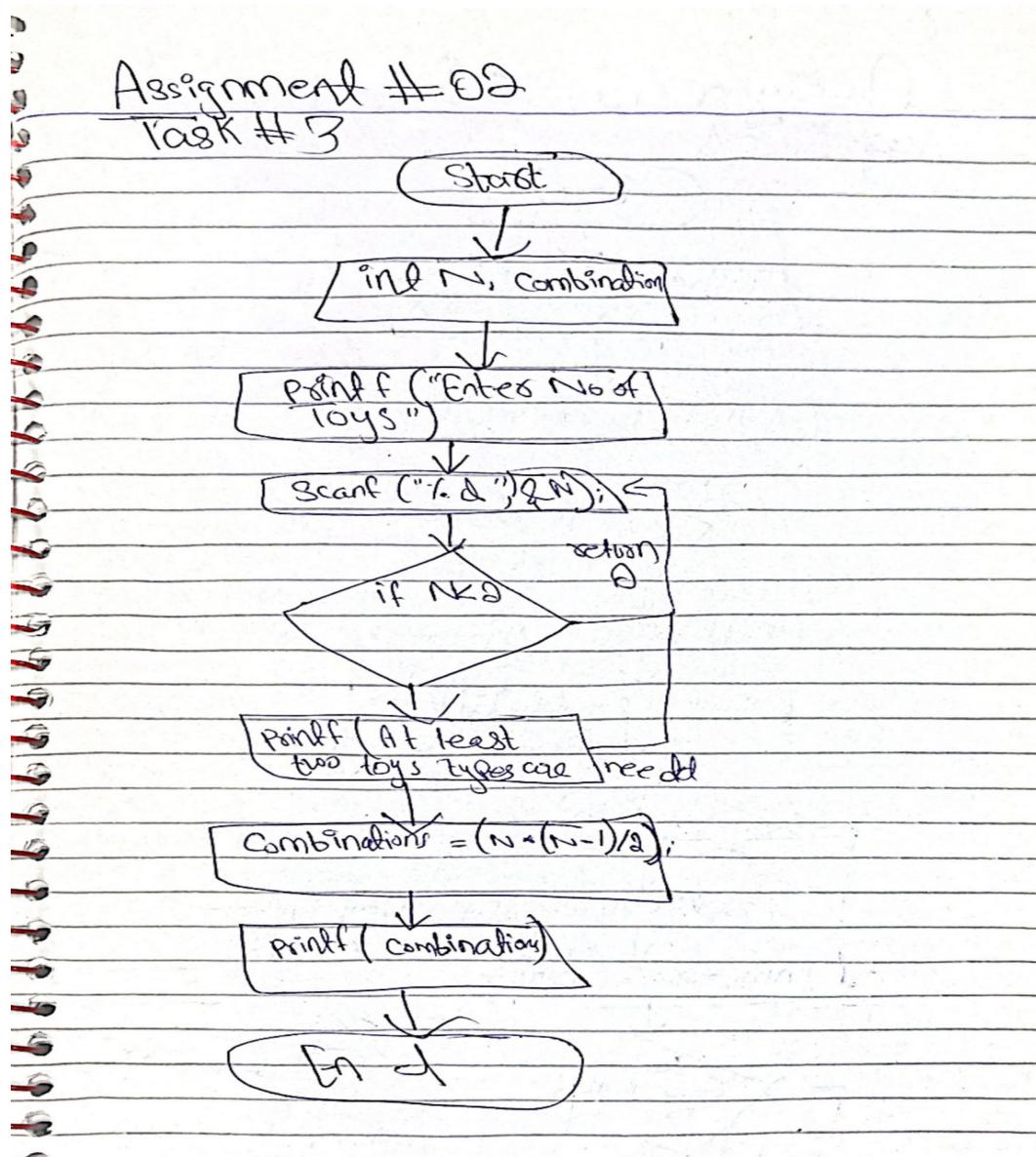


PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

```
● Khalilrehman@khalilrehman-ThinkPad-T14-Gen-1:~/Documents/Assignment#02$ gcc task2.c -o task2
● Khalilrehman@khalilrehman-ThinkPad-T14-Gen-1:~/Documents/Assignment#02$ ./task2
Enter number of coin toss trials: 5
Heads: 2 (40.00%)
Tails: 3 (60.00%)
○ Khalilrehman@khalilrehman-ThinkPad-T14-Gen-1:~/Documents/Assignment#02$ █
```

## TASK#03

Flow Chart:





## Terminal Output:

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

● khalilrehman@khalilrehman-ThinkPad-T14-Gen-1:~/Documents/Assignment#02$ gcc task3.c -o task3
● khalilrehman@khalilrehman-ThinkPad-T14-Gen-1:~/Documents/Assignment#02$ ./task3
Enter number of toy types: 5
Number of unique pairs: 10
○ khalilrehman@khalilrehman-ThinkPad-T14-Gen-1:~/Documents/Assignment#02$ █
```