



Digital Design Verification

Assignment # 01

Conditionals

Submitted by:

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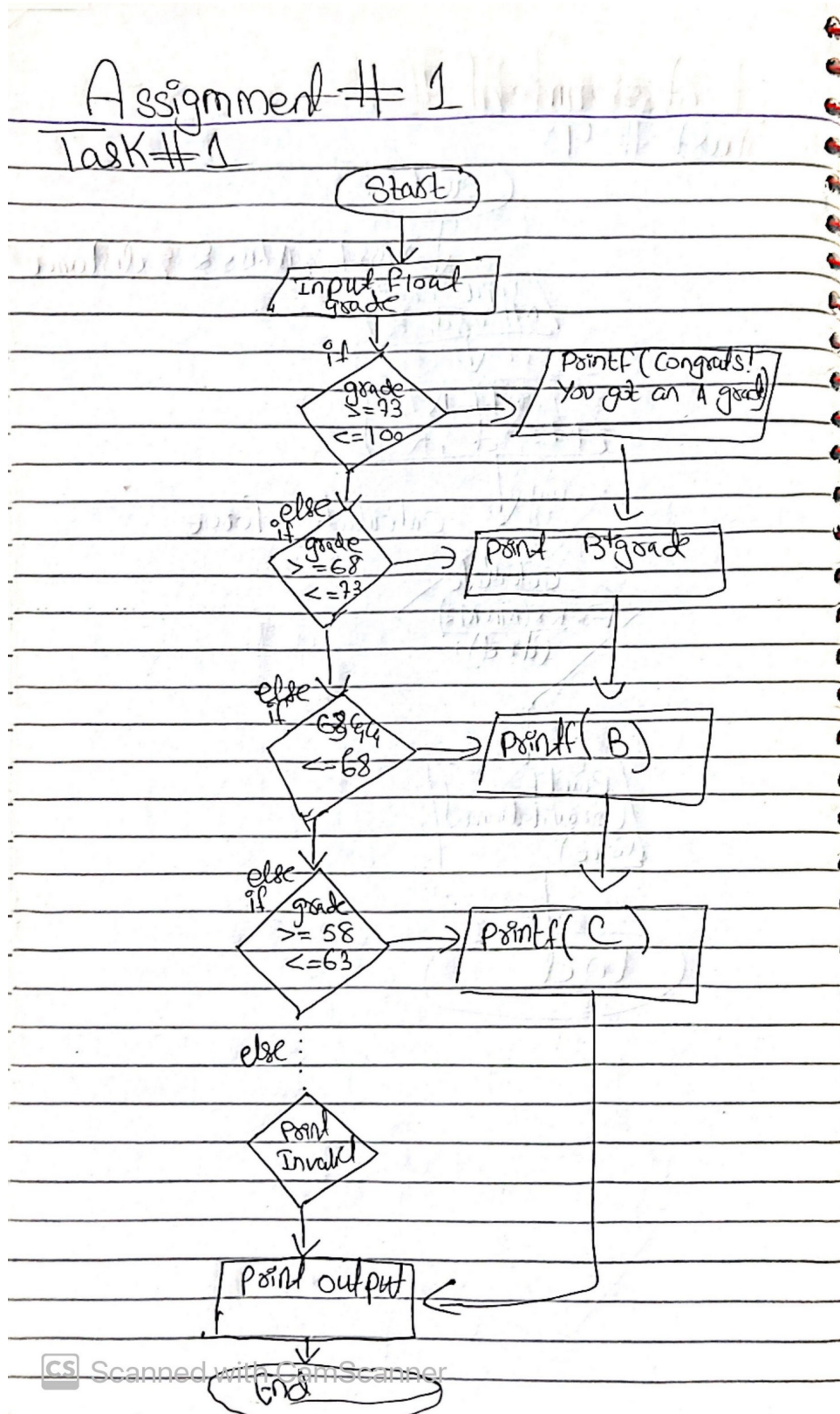
Date:
July 15, 2025

NUST Chip Design Centre (NCDC), Islamabad, Pakistan



TASK # 01:

Flow Chart:



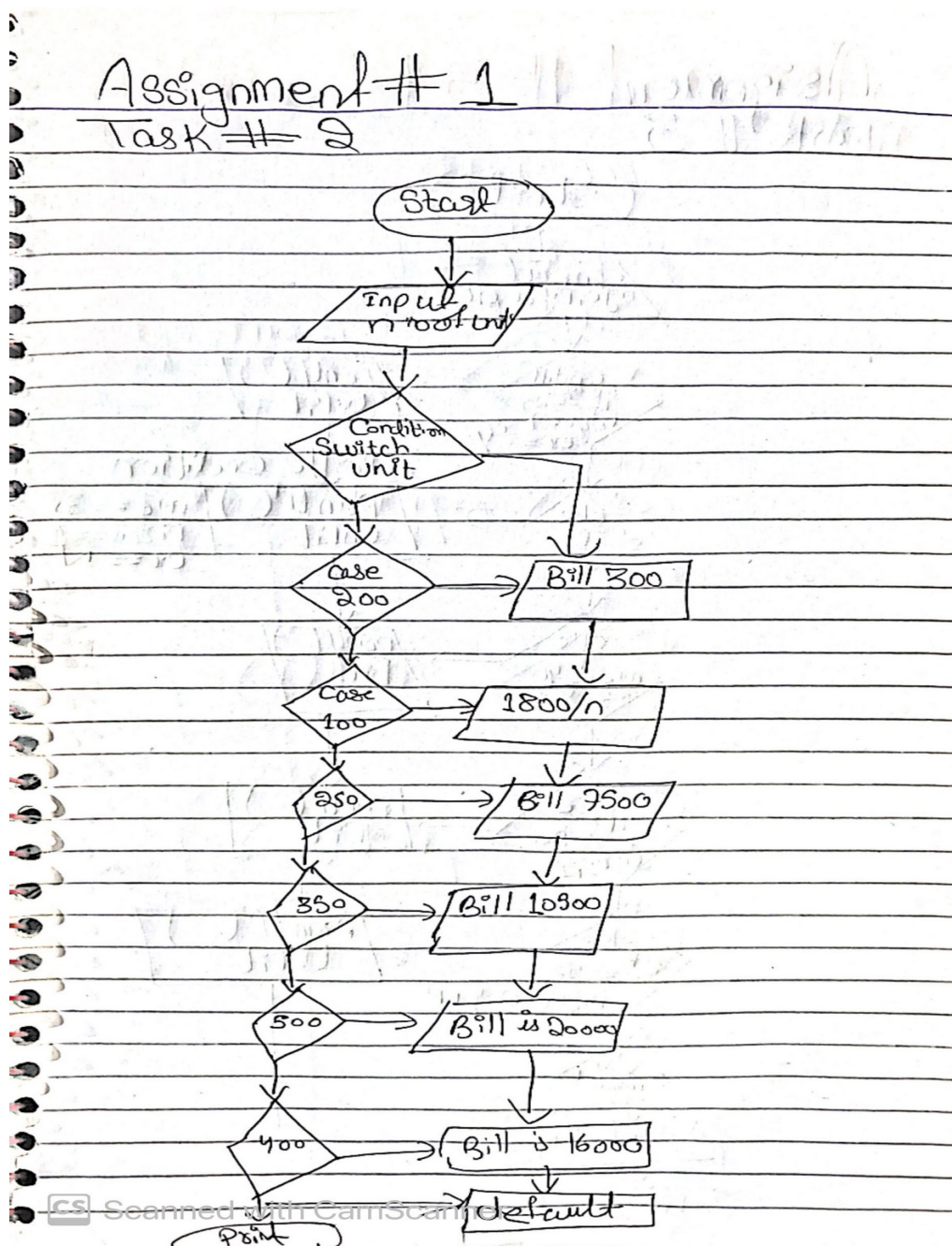


Terminal output:

```
cc@ncdc-0087:~/Documents/KR/Lab1
File Edit View Search Terminal Help
[cc@ncdc-0087 Lab1]$ gcc task1.c -o task1
[cc@ncdc-0087 Lab1]$ ./task1
Please Enter Your Marks:74
Congrats! You got an A grade
[cc@ncdc-0087 Lab1]$ gcc task1.c -o task1
[cc@ncdc-0087 Lab1]$ ./task1
Please Enter Your Marks:52
You got a C grade
[cc@ncdc-0087 Lab1]$
```

TASK # 02:

Flow Chart:





Terminal output:

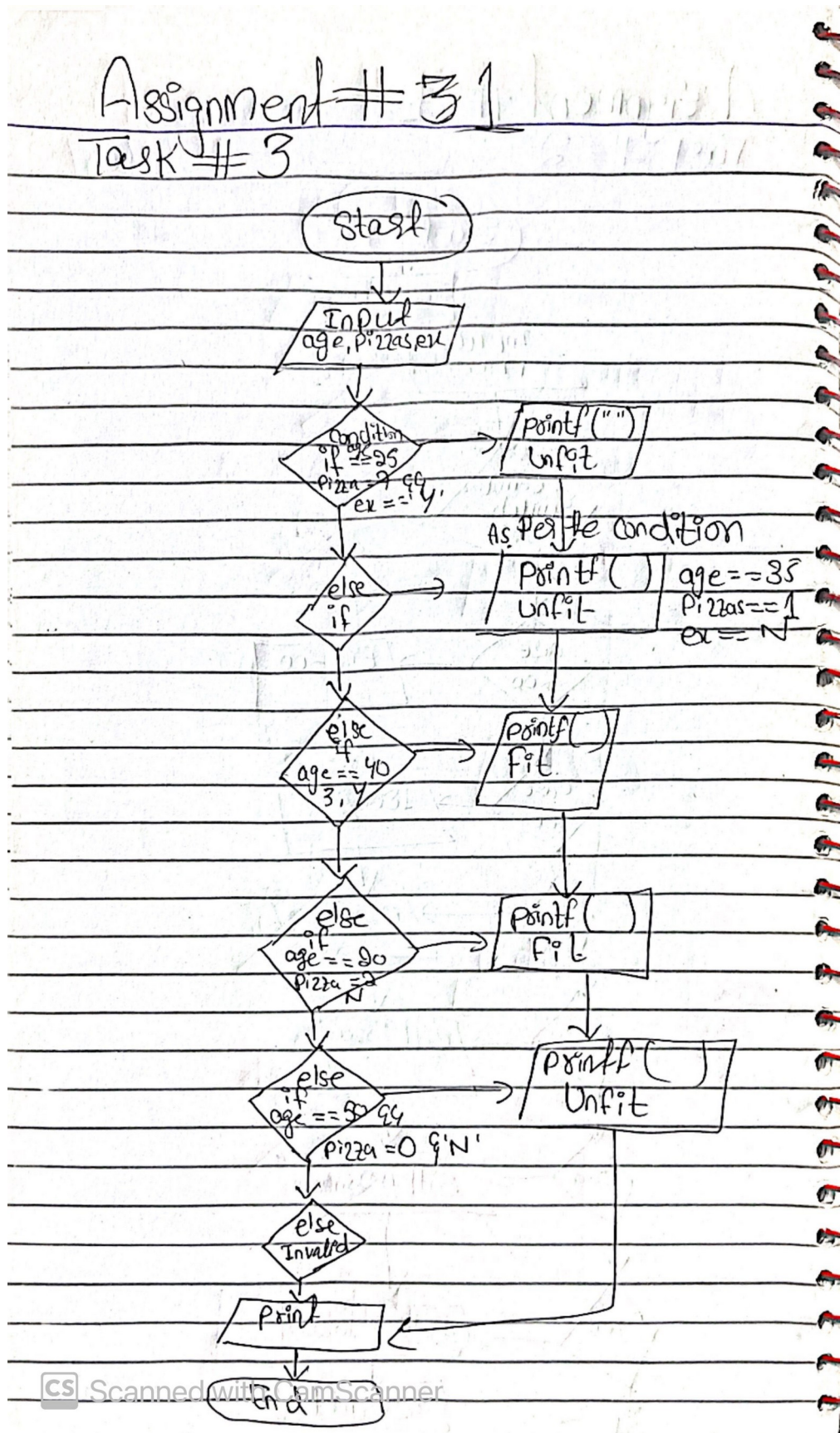
```
cc@ncdc-0087:~/Documents/KR/Lab1
File Edit View Search Terminal Help

[cc@ncdc-0087 Lab1]$ gcc task2.c -o task2
[cc@ncdc-0087 Lab1]$ ./task2
Enter No. of Units:200
Your Bill is 3600
[cc@ncdc-0087 Lab1]$ ./task2
Enter No. of Units:100
Your Bill is 1800
[cc@ncdc-0087 Lab1]$ ./task2
Enter No. of Units:250
Your Bill is 7500
[cc@ncdc-0087 Lab1]$ ./task2
Enter No. of Units:500
Your Bill is 20000
[cc@ncdc-0087 Lab1]$ ./task2
Enter No. of Units:400
Your Bill is 16000
[cc@ncdc-0087 Lab1]$
```




TASK # 03:

Flow Chart:





TERMINAL OUTPUT:

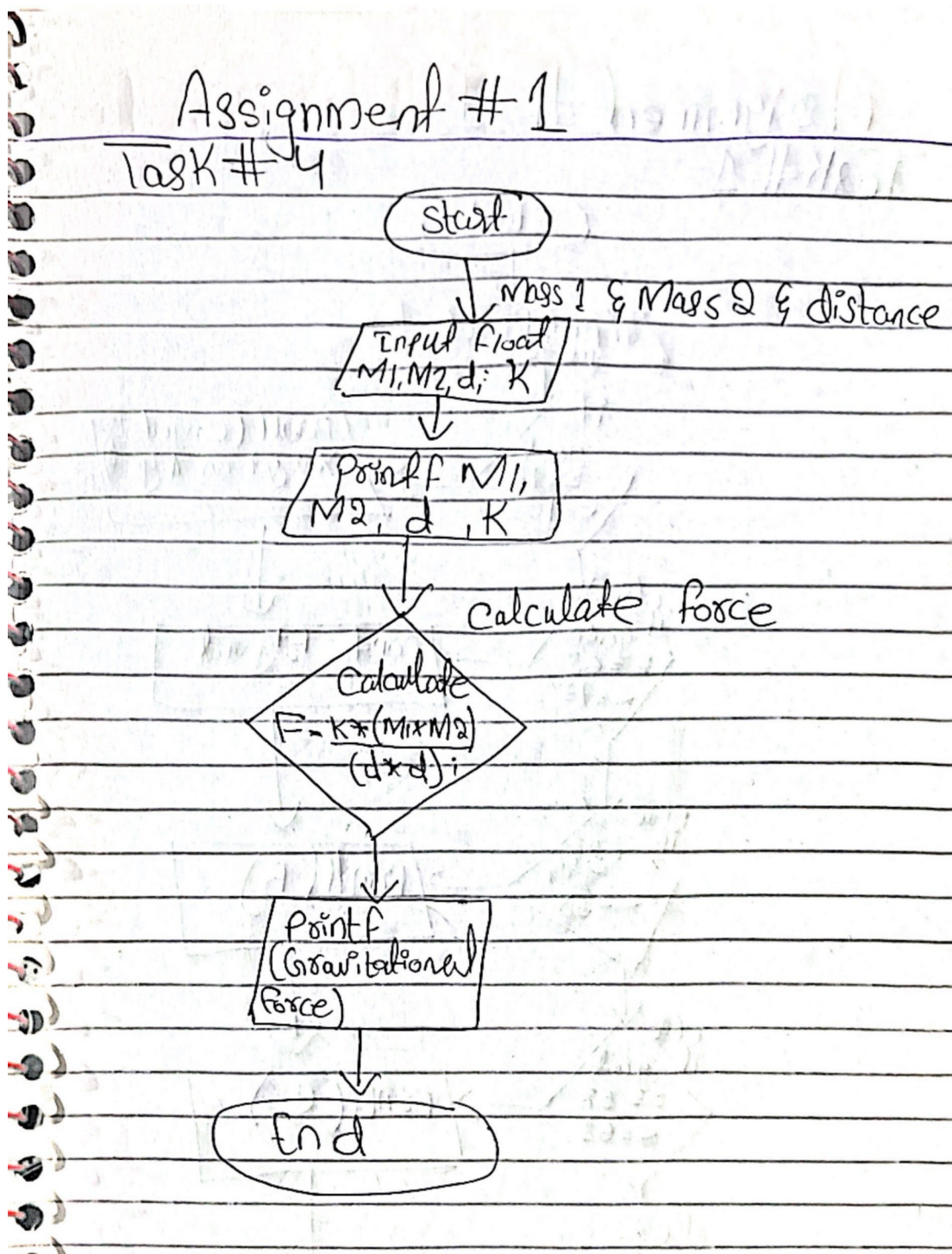
```
cc@ncdc-0087:~/Documents/KR/Lab1
File Edit View Search Terminal Help

[cc@ncdc-0087 Lab1]$ ./task3
Please enter the age of the person (years) : 25
Please enter how many pizzas he eat per week : 7
Please mention whether he exercises daily in the morning: Y
The person is 'Unfit'
[cc@ncdc-0087 Lab1]$ ./task3
Please enter the age of the person (years) : 35
Please enter how many pizzas he eat per week : 1
Please mention whether he exercises daily in the morning: N
The person is 'Unfit'
[cc@ncdc-0087 Lab1]$ ./task3
Please enter the age of the person (years) : 40
Please enter how many pizzas he eat per week : 3
Please mention whether he exercises daily in the morning: Y
The person is 'Fit'
[cc@ncdc-0087 Lab1]$ ./task3
Please enter the age of the person (years) : 20
Please enter how many pizzas he eat per week : 2
Please mention whether he exercises daily in the morning: N
The person is 'Fit'
[cc@ncdc-0087 Lab1]$ ./task3
Please enter the age of the person (years) : 50
Please enter how many pizzas he eat per week : 0
```




TASK # 04:

FLOW CHART:





TERMINAL OUTPUT:

```
• khalilrehman@khalilrehman-ThinkPad-T14-Gen-1:~/Documents/Assignment # 1$ ./task4
Enter mass of body 1 (in grams): 500
Enter mass of body 2 (in grams): 800
Enter distance between the bodies (in cm): 20
Gravitational Force: 0.000067
```