

BANGLADESH SCHOOL & COLLEGE, WAHAT



Sultanate of Oman

Information and Communication Technology

Practical Notebook

Class: Eleven - Twelve

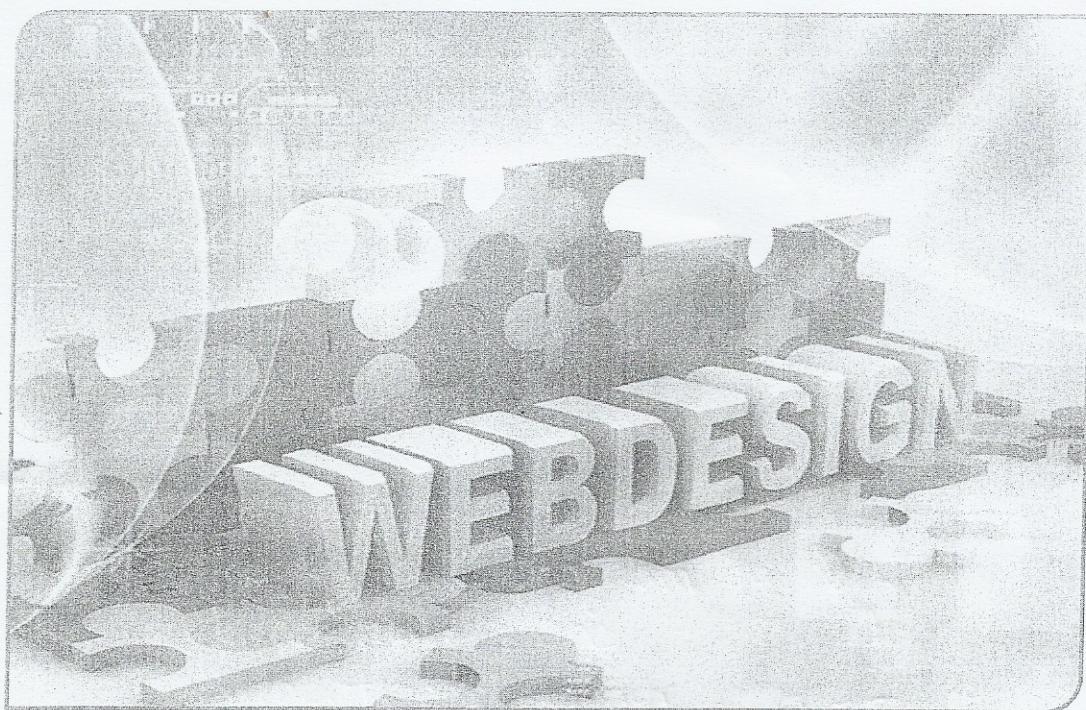
Designed by
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Roll no.		Reg. no.
Session	2020 - 2021	
Board	Dhaka	

বাবুর মেট্রুক ; টেক্স ও মেসাজের প্রযুক্তি

ওয়েব ডিজাইন পরিচিতি এবং HTML



ছাত্র/ছাত্রী পরিচিতি

নাম: Najmul Huda

ক্লাশ রোল: 2000

সেশন: Science

বোর্ড রোল:

রেজিঃ নং:

বিভাগ/শাখা: Dhaka

কলেজের নাম: Bangladesh School & College, Saham

পরীক্ষকের দ্বাক্ষর

Vidoria

ব্যবহারিক মেটুরুক : তথ্য ও যোগাযোগ প্রযুক্তি
ওয়েব ডিজাইন পরিচিতি এবং HTML

পৃষ্ঠা নং: 01

পরীক্ষণ নং: 01

তারিখ: 10-02-2022

1) Creating a HTML File with Formatting Tags

Theory:

HTML means Hypertext Markup Language.

Website is the combination of many webpages.

To create a webpage, at first we need to create a HTML file. Generally, we use any IDE to create a HTML file. After creating HTML file, we have to save it in any directory of our computer. We can change, update and edit this saved file.

Equipment/Tools:

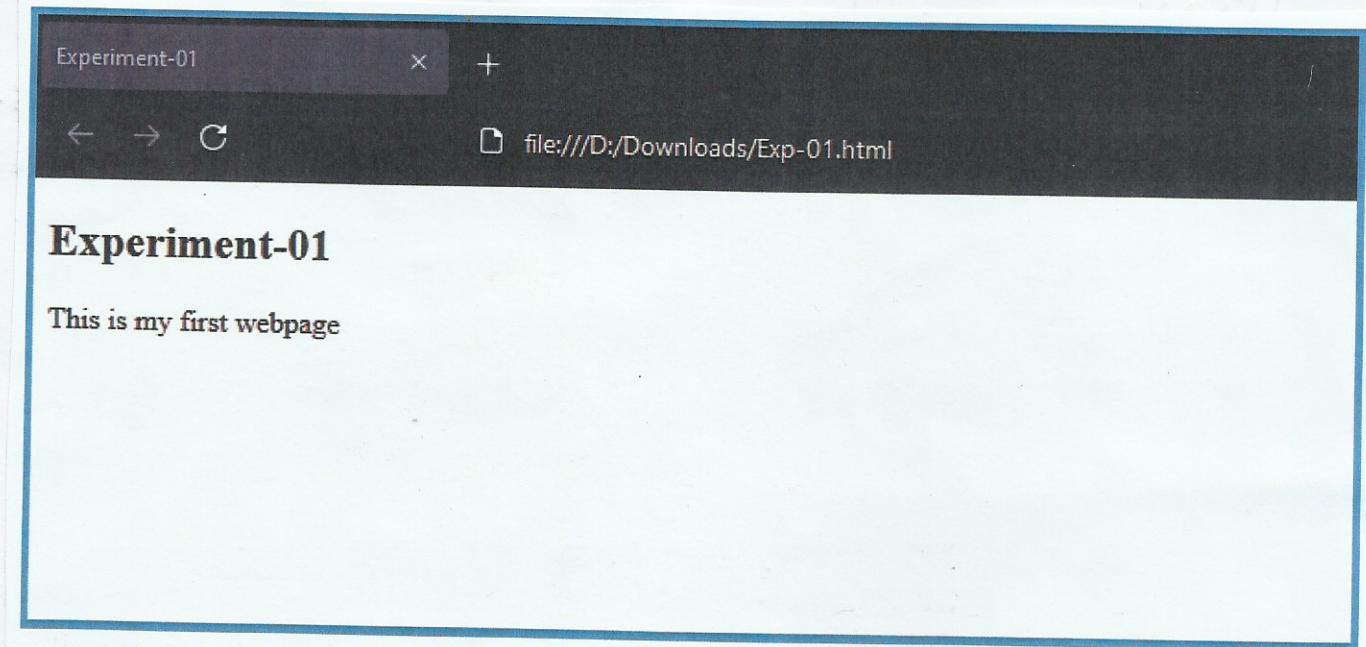
Hardware: A computer (Desktop or Laptop)

Software: a) Operating System - Windows 10.

b) Application - Notepad or VS Code, Internet Explorer.

Working Procedure:

We have to follow the following steps in order to complete the experiment:



(qutip) no qutip (qutip) no qutip
or webview - mistake gotten on (e) smooth
and no bogoliu - mistake gotten on (e)
smooth & repeat

in qutip get out socket or send on
the message out - mistake or when

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ওয়েব ডিজাইন পরিচিতি এবং HTML

পৃষ্ঠা নং : 02

পরীক্ষণ নং : 01

তারিখ : 10-02-2022

- 1) Turn on the computer and login.
- 2) Open Visual Studio Code program and create a new project named 'Exp-01.html'.
- 3) Type the following commands into the code editor:

```
<!DOCTYPE html>

<html>
  <head>
    <title> Experiment - 01 </title>
  </head>
  <body>
    <h2> Experiment - 01 </h2>
    <p> This is my first webpage </p>
  </body>
</html>
```

- 4) Press Ctrl + S to save the file.

Result:

After completing the experiment, our webpage will be ready.

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পৃষ্ঠা নং : 03

পরীক্ষণ নং : 02

তারিখ : 10-02-2022

- 2) Creating a table to present information in a HTML file.

Theory:

To create a table in HTML, we use `<table>`, `<th>`, `<tr>`, `<td>` tags.

Equipment/Tools:

Hardware: A computer

Software: a) Operating System - Windows 10

b) Application - VS Code & Google Chrome

Working Procedure:

- 1) Turn on the computer and login.
- 2) Open VS Code program and create a new project named 'Exp-02.html'.
- 3) Type the following commands into the code editor:

Experiment-02

X Experiment-01 X +

← → C file:///D:/Downloads/Exp-02.html

Experiment-02

Roll	Name
2000	Wahid
2003	Potato

```
<!DOCTYPE html>
```

```

<html>
  <head>
    <title> Experiment - 02 </title>
  </head>
  <body>
    <h2> Experiment - 02 </h2> <br>
    <table border = "1">
      <tr> <th> Roll </th> <th> Name </th> </tr>
      <tr> <td> 2000 </td> <td> Wahid </td> </tr>
      <tr> <td> 2003 </td> <td> Potato </td> </tr>
    </table>
  </body>
</html>

```

4) Press Ctrl + S to save the file.

Result:

After completing the experiment, the table will be visible in the webpage.

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ওয়েব ডিজাইন পরিচিতি এবং HTML

পৃষ্ঠা নং : 05

পরীক্ষণ নং : 03

তারিখ : 10-02-2022

3) Linking Multiple Pages & Image to a Webpage.

Theory:

Website is the combination of multiple webpages. We use `<a>` tag to link one page to another page. We use `` tag to add image to a page.

Equipment:

Hardware: A computer

Software: a) Operating System - Windows 10
b) Application:- VS Code & Google Chrome.

Working Procedure:

- 1) Turn on the computer & login.
- 2) Open VS Code program and create a new project named 'Exp-03.html'.
- 3) Type the following commands into the code editor;

```
<!DOCTYPE html>
<html>
|   <head>
```

Experiment-03

X +

← → C

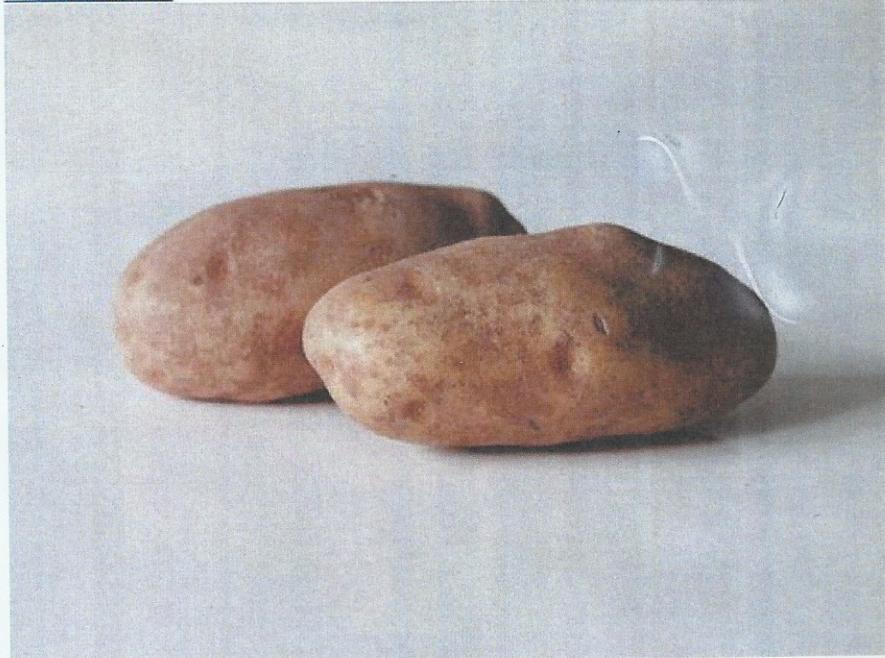
file:///D:/Downloads/Practical/Exp-03.html

Experiment-03

Experiment-01

Experiment-02

Experiment-04



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ওয়েব ডিজাইন পরিচিতি এবং HTML

পৃষ্ঠা নং : 06

পরীক্ষণ নং : 03

তারিখ : 11-02-2022

```
<title> Experiment - 03 </title>
</head>
<body>
    <h2> Experiment - 03 </h2> <br>
    <a href = "Exp-01.html" > Experiment - 01 </a>
    <br>
    <a href = "Exp-02.html" > Experiment - 02 </a>
    <br>
    <a href = "Exp-04.html" > Experiment - 04 </a>
    <br>
    <img src = "potato.jpg" width = "500" >
</body>
</html>
```

4) Press Ctrl + S to save the file.

Result:

After completing the experiment, we will get a webpage having an image and linked with multiple Webpages.

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ওয়েব ডিজাইন পরিচিতি এবং HTML

পৃষ্ঠা নং : 07

পরীক্ষণ নং : 04

তারিখ : 17-02-2022

- 4) Using Paragraph, Heading, Format, Color, Bullets, Numbering and Frame tag.

Theory:

With the help of `<p>`, `<h1>`, ``, ``, ``, `<iframe>`, we can create a webpage having texts formatted with different formats and a GIF.

Equipment:

Hardware : A Computer.

Software : a) Operating System:- Windows 10

b) Application :- VS Code & Google Chrome.

Working Procedure:

- 1) Turn on the computer and login.
- 2) Open VS Code program and create a new project named 'Exp-04.html'.
- 3) Type the following commands into the code editor:

Experiment-04

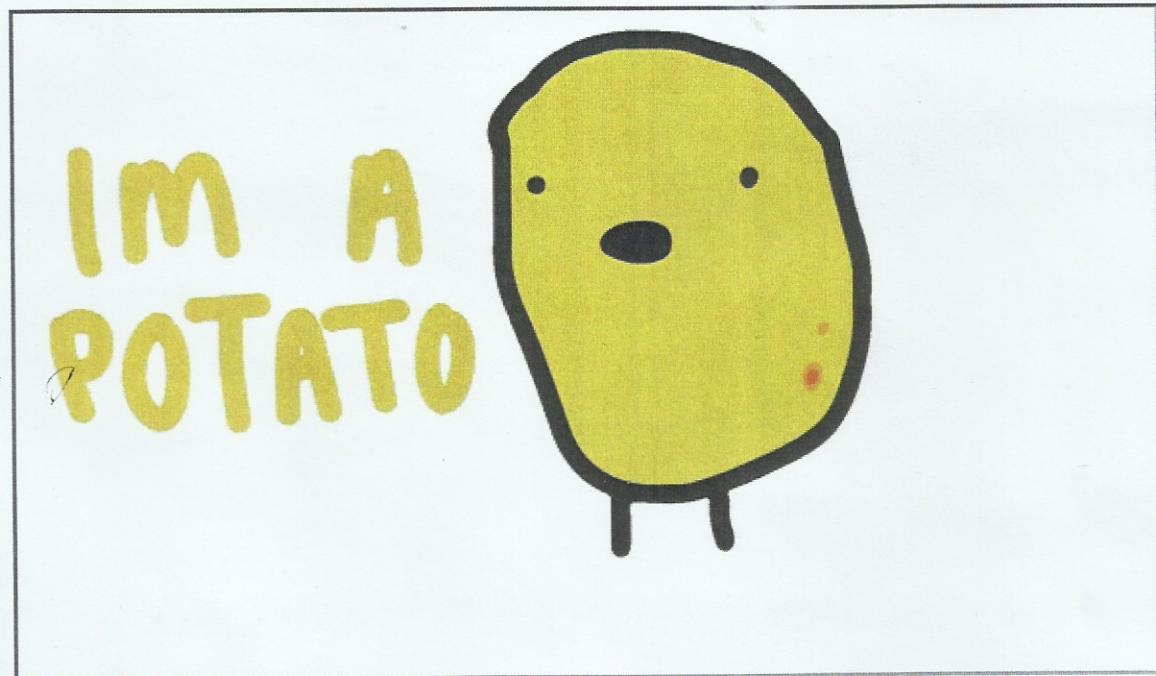
Using bullets, numbering and frame

An Ordered List

1. Potato
2. Tomato
3. Pumpkin

An Unordered List

- Potatoes
- Tomatoes
- Pumpkins



Experiment-04 | Home | Logout | user
at 10:00 AM on 2023-09-06 (6 minutes ago)

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title> Experiment - 04 </title>
```

```
</head>
```

```
<body>
```

```
<h2> Experiment - 04 </h2>
```

```
<h3> Using bullets, numbering and frame </h3>
```

```
<p><u><font face="Arial" color="Red">
```

An ordered List </u> </p>

```
<ol>
```

```
<li> Potato </li>
```

```
<li> Tomato </li>
```

```
<li> Pumpkin </li>
```

```
</ol>
```

```
<p><u><font face="Arial" color="Green">
```

An Unordered List </u> </p>

```
<ul>
```

```
<li> Potatoes </li>
```

```
<li> Tomatoes </li>
```

```
<li> Pumpkins </li>
```

```
</ul>
```

```
<br>
```

```
<iframe src="Potato.gif" width="600"  
height="350"></iframe>
```

```
</body>
```

```
</html>
```

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ওয়েব ডিজাইন পরিচিতি এবং HTML

পৃষ্ঠা নং : 09

পরীক্ষণ নং : 04

তারিখ : 17-02-2022

4) Press Ctrl + S to save the file.

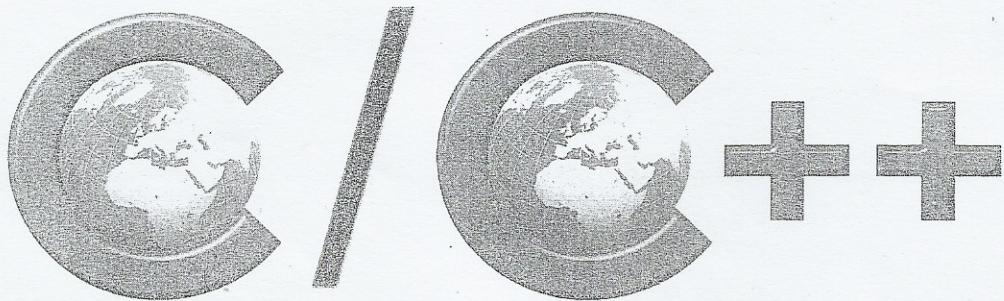
Result:

After completing the experiment, our webpage numbering, bullets and frame will be ready.

পৃষ্ঠা নম্বর :

ব্যবহারিক নোটবুক : তথ্য ও মোগামোগ প্রযুক্তি

সি প্রোগ্রামিং



PROGRAMMING

ছাত্র/ছাত্রী পরিচিতি

নাম: Najmul Huda

ক্লাশ নং: 2000

মেশন: Science

বোর্ড নং:

রেজিঃ নং:

বিভাগ/শাখা: Dhaka

কলেজের নাম: Bangladesh School & College, Saham

ପ୍ରମିଳାକୁମାର

5) Creating a C program to determine a number is positive, negative or zero (Input/ Output and Conditional Statement).

Theory:

In this experiment, we will create a C program which will determine if a number is positive, negative or zero. We will determine the nature of number by comparing it with zero. If it is greater than zero, the number is positive. If the number is smaller than zero, it is a negative number. If the number is neither positive nor negative, then it is zero.

Equipment:

Hardware: A computer

Software : a) Operating System: Windows 10.

b) Program: Code::Blocks.

main.c

```
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 void main()
5 {
6     int a;
7     printf("Enter your number:");
8     scanf("%d", &a);
9     if(a>0)
10         printf("The number is positive");
11     else if(a<0)
12         printf("The number is negative");
13     else
14         printf("The number is zero");
15     return 0;
16 }
17
```

D:\Downloads\Practical\C code\Exp-04\bin\Debug\Exp-04.exe

```
Enter your number:-420
The number is negative
Process returned 22 (0x16) execution time : 6.142 s
Press any key to continue.
```

Algorithm:-

Step 1 :- Start

Step 2 :- Input the value of a.

Step 3 :- If the value of a is greater than 0 then go to step-4 otherwise go to step-5.

Step 4 :- The number is positive.

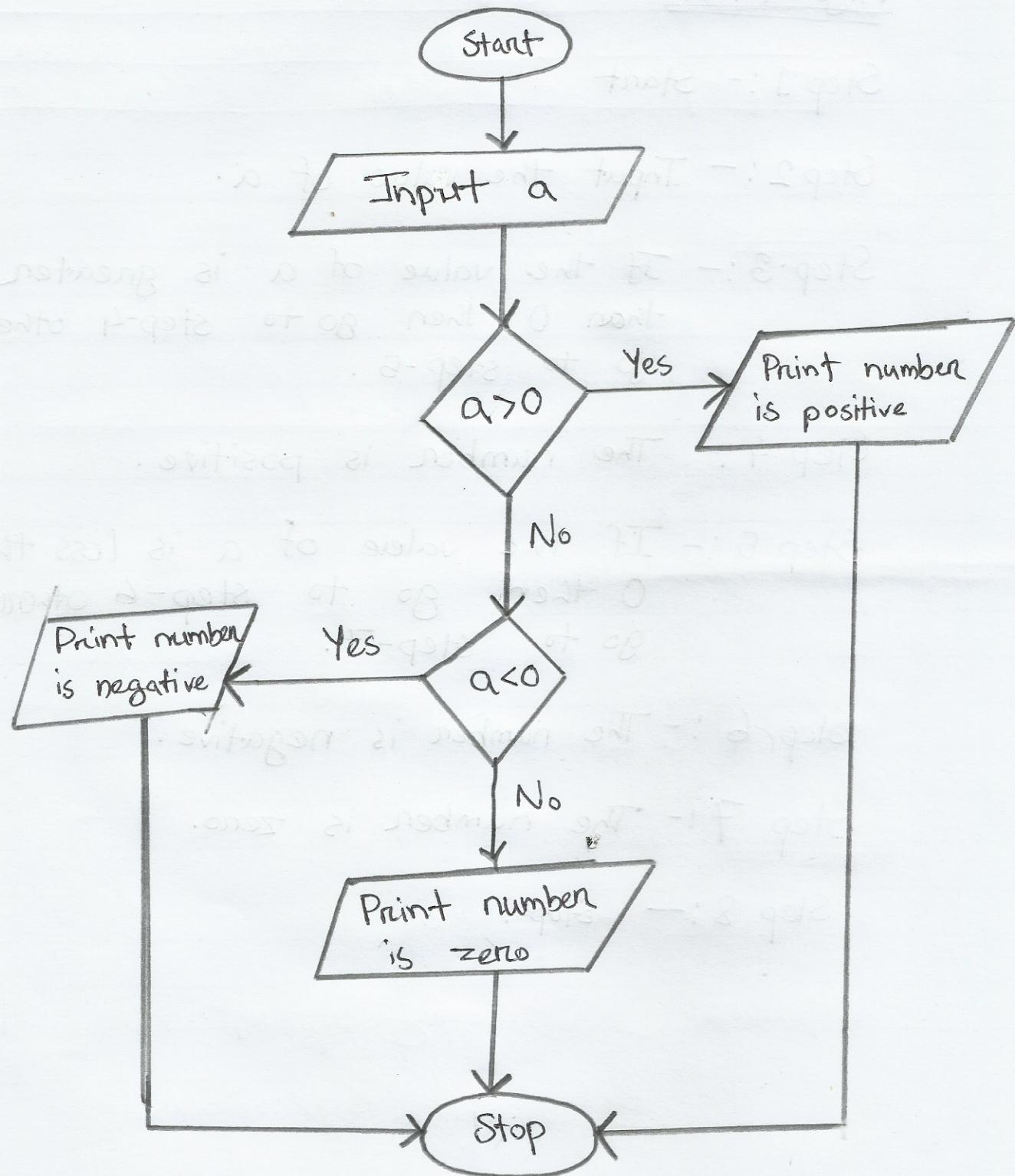
Step 5 :- If the value of a is less than 0 then go to step-6 otherwise go to step-7.

Step 6 :- The number is negative.

Step 7 :- The number is zero.

Step 8 :- Stop.

Flow-charts :-



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পরীক্ষা নং : 05

তারিখ : 18-02-2022

Working Procedure:

- 1) Turn on the computer and login.
- 2) Open Code::Blocks and create a new console application selecting C and name it "Exp-04.cbp".
- 3) Type the following codes :

```
#include <stdio.h>
#include <stdlib.h>

void main ()
{
    int a;
    printf ("Enter your number:");
    scanf ("%d", &a);

    if (a > 0)
        printf ("The number is positive");

    else if (a < 0)
        printf ("The number is negative");

    else
        printf ("The number is zero");

    return 0;
}
```

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পৃষ্ঠা নং : 13

পরীক্ষা নং : 05

তারিখ : 18-02-2022

4) Press Ctrl + S to save the file.

5) Press F9 to run the program.

Result:

After completion of the experiment, we will have a program which can determine if a number is positive, negative or zero.

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পরীক্ষা নং : 06

তারিখ : 19-02-2022

6) Creating a C program to find the factorial of positive number (Loop Statement).

Theory:

To find the factorial of positive number we will follow the rule $n! = 1 * 2 * 3 * \dots * (n-1) * n$.

Equipment:

Hardware: A computer

Software: a) Operating System: Windows 10

b) Program : Code :: Blocks .

Algorithm:

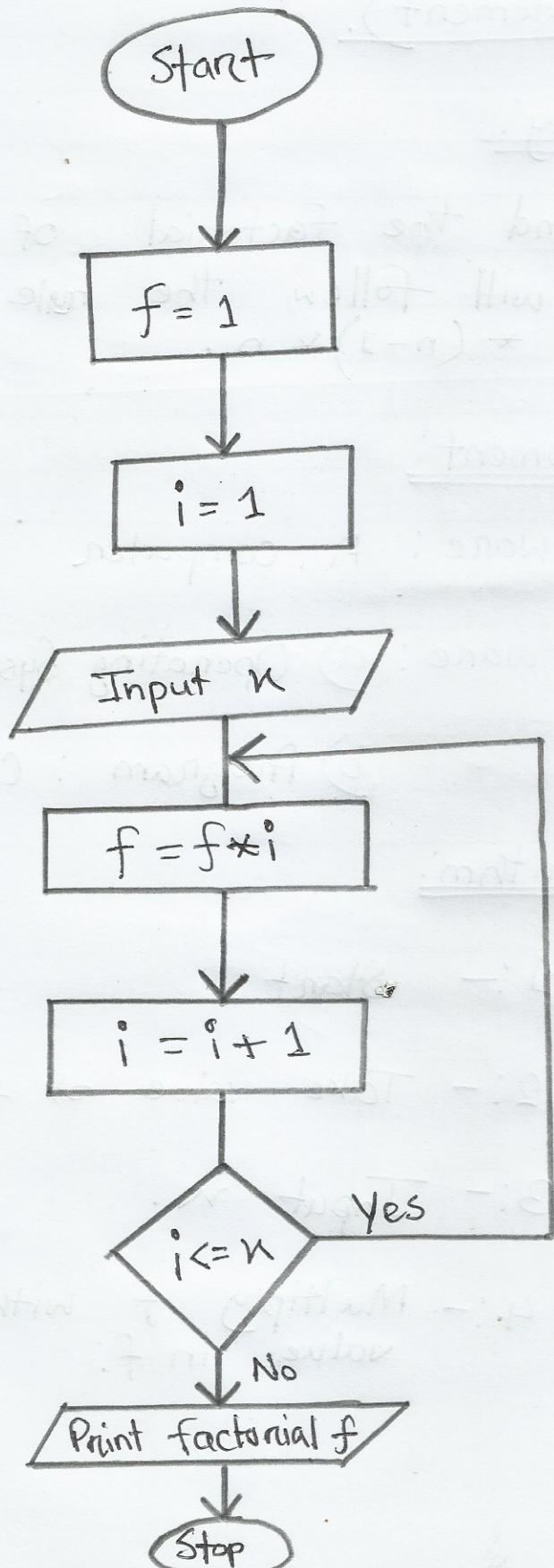
Step 1:- Start

Step 2:- Take value of $f=1$ and $i=1$.

Step 3:- Input n .

Step 4:- Multiply f with i and store in f .

Flow-Chart:-



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পরীক্ষা নং : 06

তারিখ : 19-02-2022

Step 5 :- Increment value of i by 1.Step 6 :- If i is less than or equal to n , then go to step-4, otherwise go to step-7.Step 7 :- Print factorial f .

Step 8 :- Stop.

Working Procedure:

- 1) Turn on the computer and login.
- 2) Open code::Blocks and create a new console application selecting C and name it "Exp-06.cbp".
- 3) Type the following codes:

```
#include <stdio.h>
#include <stdlib.h>
```

```
int main ()
{
    int i, f, n;
    f = 1;
```

• I po i do value from user →; 3 qots

• loops no want call ei i tk →; 3 qots

• dt-qots et og want a N

• F-qots et og seiminde.

The screenshot shows a code editor with a file named 'main.c' containing C code for calculating factorial. The code includes #include directives for stdio.h and stdlib.h, a main function that prompts for a positive number, initializes f=1 and i=1, uses a while loop to calculate the factorial (f=f*i, i=i+1) until i is less than or equal to x, and prints the result. A terminal window shows the execution of the program, entering 5 as input, and displaying the output "Factorial is = 120".

```
main.c X
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 int main()
5 {
6     int i,x,f;
7     f=1;
8     i=1;
9     printf("Enter a positive number= ");
10    scanf("%d", &x);
11    while(i<=x)
12    {
13        f=f*i;
14        i=i+1;
15    }
16    printf("Factorial is = %d", f);
17    return 0;
18 }
19
```

"D:\Downloads\Practical\C code\Exp-06\bin\Debug\Exp..." — □ X

Enter a positive number= 5
Factorial is = 120
Process returned 0 (0x0) execution time : 1.544 s
Press any key to continue.

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পরীক্ষা নং : 06

তারিখ : 19-02-2022

 $i = 1;$

```
printf ("Enter a positive number = ");
scanf ("%d", &n);
while (i <= n)
```

 $f = f * i$ $i = i + 1$

```
}
```

```
printf ("Factorial is = %d", f);
return 0;
```

}

4) Press $Ctrl + S$ to save the file.

5) Press F9 to run the program.

Result:

After completing the experiment, we will have a program which can determine the factorial of any positive number.

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পরীক্ষা নং : 07

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৩) Creating a C program to greet the user with the help of function.

Theory:

A function is a self-contained program segment that carries out some specific well defined task. Every C program consists of one or more function.

Equipment:

Hardware : A Computer

Software : a) Operating System : Windows 10.

b) Application : Code::Blocks .

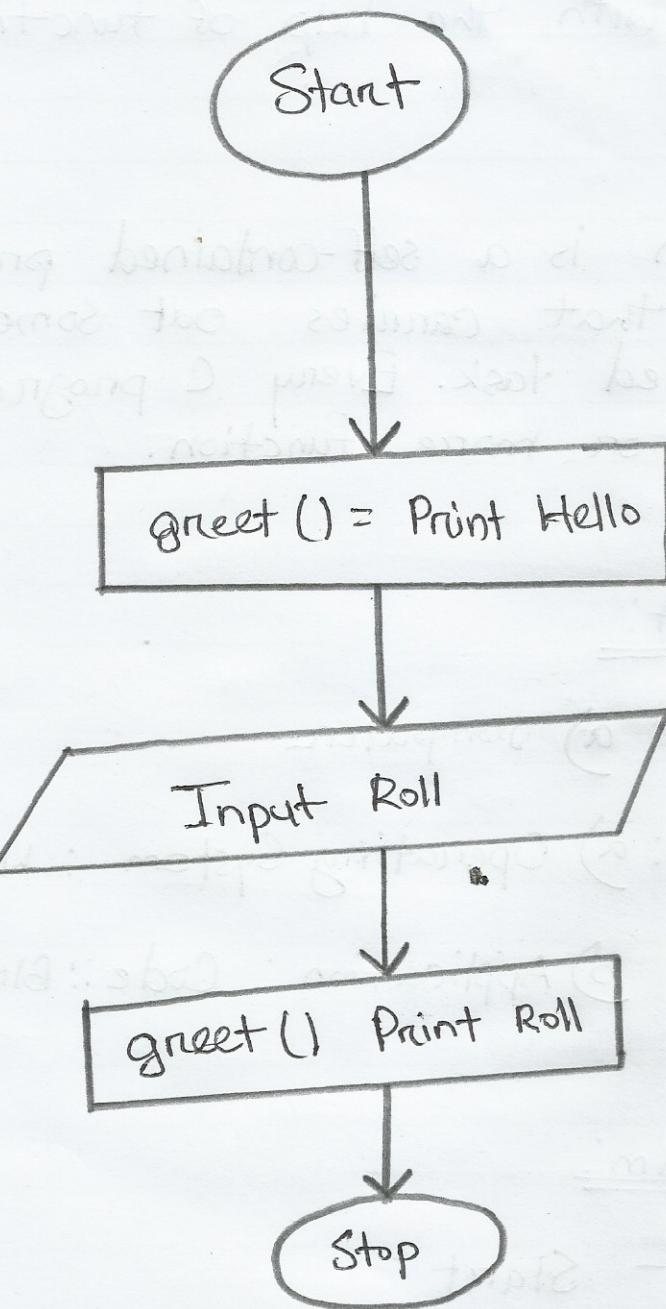
Algorithm:

Step 1 :- Start

Step 2 :- Declare and define function greet () .

Step 3 :- Input Roll number.

Flow-chart:



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পরীক্ষা নং: 07

তারিখ: 19-02-2022

Step 4:- Execute greet () function and print Roll.

Step 5:- Stop

Working Procedure:

- 1) Turn on the computer and login.
- 2) Open code::Blocks and create a new console application selecting C and name it "Exp-07.cbp".
- 3) Type the following codes :

```
#include <stdio.h>
#include <stdlib.h>
```

```
greet();
```

```
greet()
{
    printf ("\n Hello ");
}
```

```
void main()
{
```

The image shows a screenshot of a computer interface. On the left, there is a code editor window titled "main.c X" containing C code. The code defines a greet() function that prints "Hello Roll %d!" and a main() function that prompts for a roll number, calls greet(), and prints the result. On the right, there is a terminal window titled "D:\Downloads\Practical\C code\Function\bin\Debug\Function.exe". It shows the program's output: "Enter your roll: 2000", "Hello Roll 2000!", and "Process returned 10 (0xA) execution time : 3.473 s".

```
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 greet();
5
6 greet()
7 {
8     printf("\nHello ");
9 }
10
11 void main()
12 {
13     int roll;
14
15     printf("Enter your roll: ");
16     scanf("%d", &roll);
17     greet();
18     printf("Roll %d!", roll);
19 }
20
21
```

D:\Downloads\Practical\C code\Function\bin\Debug\Function.exe
Enter your roll: 2000
Hello Roll 2000!
Process returned 10 (0xA) execution time : 3.473 s
Press any key to continue.

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তারিখ : 19-02-2022

```
int roll;
```

```
printf ("Enter your roll : ");
scanf ("%d", &roll);
greet ();
printf ("Roll %d!", roll);
```

```
}
```

- 4) Press Ctrl + S to save the file.
- 5) Press F9 to run the program.

Result:

After completing the experiment, we will have a program that will greet the user with help of function.

8) Creating a C Program to demonstrate one dimensional array.

Theory:

Array is defined in much the same manner as ordinary variable, except that each name must be accompanied by a size specification. For one dimensional array, the size is specified by a positive integer expression, enclosed in square bracket.

Equipment:

Hardware : A computer.

Software : a) Operating System :- Windows 10

b) Application :- Code :: Blocks

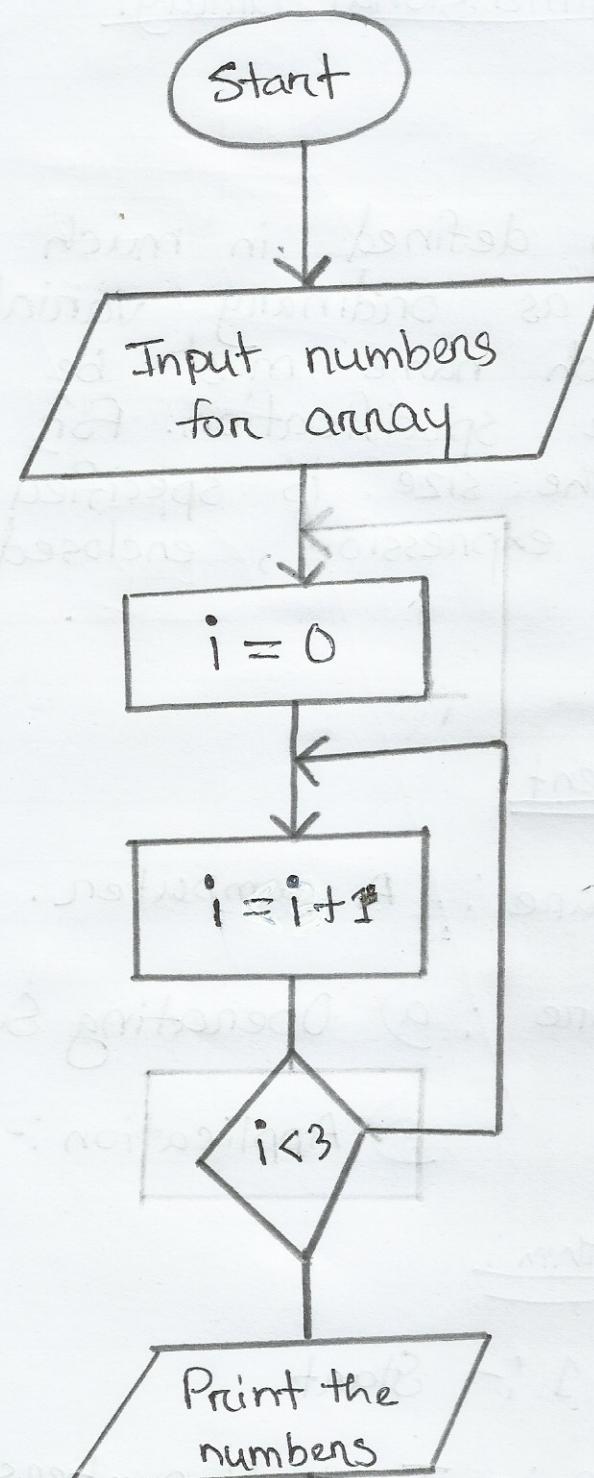
Algorithm:

Step 1 :- Start

Step 2 :- Input 3 numbers.

Step 3 :- If number of input is less than 3, go to step-2. Otherwise go to step-4.

Flow-charts:-



Step 4 :- Print the numbers.

Step 5 :- Stop.

Working Procedure:

- 1) Turn on the computer and login.
- 2) Open Code :: Blocks and create a new console application selecting C and name it "Exp-08.cbp".
- 3) Type the following codes:

```
# include <stdio.h>
# include <stdlib.h>
```

```
int main ()
{
    int a[3], i;
    printf("Enter three numbers : ");
    for (i=0 ; i<3 ; i++)
    {
        scanf ("%d", &a[i]);
    }
}
```

main.c X

```
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 int main()
5 {
6     int a[3], i;
7
8     printf("Enter three numbers: ");
9
10    for(i=0; i<3; i++)
11    {
12        scanf("%d", &a[i]);
13    }
14
15    printf("\nNumbers are: ");
16
17    for(i=0; i<3; i++)
18    {
19        printf("%d", a[i]);
20    }
21
22    return 0;
23 }
```

D:\Downloads\C code\Array\bin\Debug\Array.exe Enter three numbers: 2 5 6
Numbers are: 256
Process returned 0 (0x0) execution time : 3.871 s
Press any key to continue.

((("C program sent method"))
((((i > j) & (l = i)) not
((Max, "b") same))

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সি প্রোগ্রামিং

পৃষ্ঠা নং: 22

পরীক্ষা নং: 08

তারিখ: 19-02-2022

```
printf ("\nNumbers are: ");
for (i=0; i<3; i++)
{
    printf ("%d", a[i]);
}
return 0;
```

- 4) Press Ctrl + S to save the file.
- 5) Press F9 to run the program.

Result:

After completing the experiment, we will have a program showing one dimensional array.