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Contents

<u>MAIN MENU.....</u>	<u>1</u>
<u>1. PROUCT MANAGEMENT.....</u>	<u>1</u>
<u>2. BOOK STORE MANAGEMENT.....</u>	<u>4</u>
<u>3. NUMBER TESTING</u>	<u>6</u>
<u>4. BASIC MATH</u>	<u>7</u>
<u>5. MATH SUITE CUMPUTATION</u>	<u>9</u>
<u>6. NUMBER CONVERSION.....</u>	<u>10</u>
<u>HISTORY OF PROGRAM</u>	<u>12</u>

Main Menu

```
===== Main_Program =====
| 1. Product Management      |
| 2. Book Store Management   |
| 3. Number Testing          |
| 4. Basic Math              |
| 5. Math Suite Computation  |
| 6. Number Conversion       |
=====
Please enter your option (enter:0 ->exit): █
```

1. Prouct Management

```
===== Product_Management =====
| 1. Create product          |
| 2. Display all products    |
| 3. Display a product by ID|
| 4. Update a product by ID  |
| 5. Delete a product by ID  |
| 6. Search for a product    |
=====
Please enter your option (enter:0 ->exit): █
```

1.create product

```
How many product you want to create? ==>4
#1 Product
Enter product ID: p0001
Enter product name: Fanta_1.5L
Enter product price($): 1.3
Enter product exp.Date(dd.mm.yy): 22.9.22
#2 Product
Enter product ID: p0002
Enter product name: Coca_330ML
Enter product price($): 0.5
Enter product exp.Date(dd.mm.yy): 19.10.23
#3 Product
Enter product ID: p0003
Enter product name: Viso_7KG
Enter product price($): 12
Enter product exp.Date(dd.mm.yy): 09.05.25
#4 Product
Enter product ID: p0004
Enter product name: Milk
Enter product price($): 4.5
Enter product exp.Date(dd.mm.yy): 19.07.22
```

2.Display products

```
-----
| Product.ID      | Product.Name    | Price  | Product.EXP.Date |
-----
| p0001           | Fanta_1.5L     | 1.3    | 22.9.22          |
| p0002           | Coca_330ML     | 0.5    | 19.10.23         |
| p0003           | Viso_7KG       | 12     | 09.05.25         |
| p0004           | Milk           | 4.5    | 19.07.22         |
-----
Press enter to exit...
█
```

3.Display product by ID

```
Enter product ID to display (enter:0 ->exit): p0005
-----
ID not found! Please enter again!
Enter product ID to display (enter:0 ->exit): p0001
-----
| Product.ID      | Product.Name    | Price  | Product.EXP.Date |
-----
| p0001           | Fanta_1.5L     | 1.3    | 22.9.22          |
-----
Press enter to exit...
█
```

4.Update product by ID

```
-----  
| Product.ID      Product.Name    Price      Product.EXP.Date |  
-----  
| p0003           Viso_7KG        12         09.05.25         |  
-----  
1. Edit product ID  
2. Edit product name  
3. Edit product price  
4. Edit product expire date  
Please enter your option (enter:0 ->exit): 3  
Enter new price($): 12.67  
  
-----  
| Product.ID      Product.Name    Price      Product.EXP.Date |  
-----  
| p0003           Viso_7KG        12.67      09.05.25         |  
-----  
1. Edit product ID  
2. Edit product name  
3. Edit product price  
4. Edit product expire date  
Please enter your option (enter:0 ->exit): 0  
  
Product updated!  
Press enter to exit...  
█
```

5.Delete product by ID

```
Enter ID of product to delete (enter:0 ->exit): p0004  
(enter:1 ->delete)__(enter:0 ->exit): 0█
```

6.Search product

```
Enter product info to search (enter:0 ->exit): Viso  
-----  
Info not found! Please enter again!  
Enter product info to search (enter:0 ->exit): Fanta_1.5L  
-----  
| Product.ID      Product.Name    Price      Product.EXP.Date |  
-----  
| p0001           Fanta_1.5L        1.3        22.9.22          |  
-----  
Press enter to exit...  
█
```

2. Book Store Management

```
=====
===== Book_Management =====
=====
| 1. Create book                      |
| 2. Display all books                |
| 3. Update a book by ID              |
| 4. Delete a book by ID              |
=====
Please enter your option (enter:0 ->exit): █
```

1.create book

```
How many book you want to create?      ==>3
#1 Book
Enter book ID: b0001
Enter book ISBN: 991-1-4421
Enter book title: Feeding
Enter book author_name: Jonh_Weh
Enter book published_year: 2002
Enter book price($): 23.7
#2 Book
Enter book ID: b0002
Enter book ISBN: 991-1-3254
Enter book title: Dropsophila
Enter book author_name: Peter_Sale
Enter book published_year: 2012
Enter book price($): 12.44
#3 Book
Enter book ID: b0003
Enter book ISBN: 991-1-6853
Enter book title: C_Program
Enter book author_name: Jonh_Weh
Enter book published_year: 1998
Enter book price($): 17.4█
```

2.Display books

ID	ISBN	Title	Author_Name	Published_Year	Price
b0001	991-1-4421	Feeding	Jonh_Weh	2002	23.7
b0002	991-1-3254	Dropsophila	Peter_Sale	2012	12.44
b0003	991-1-6853	C_Program	Jonh_Weh	1998	17.4

Press enter to exit...

3.Update product by ID

```
Enter ID of book to update (enter:0 ->exit): b0003
```

ID	ISBN	Title	Author_Name	Published_Year	Price
b0003	991-1-6853	C_Program	Jonh_Weh	1998	17.4

```
1. Edit book ID
2. Edit book ISBN
3. Edit book title
4. Edit book author name
5. Edit book published year
6. Edit book price
Please enter your option (enter:0 ->exit): 4
Enter new author name: Weh_Jonh
```

ID	ISBN	Title	Author_Name	Published_Year	Price
b0003	991-1-6853	C_Program	Weh_Jonh	1998	17.4

```
1. Edit book ID
2. Edit book ISBN
3. Edit book title
4. Edit book author name
5. Edit book published year
6. Edit book price
Please enter your option (enter:0 ->exit): 0

Book updated!
Press enter to exit...
```

4.Delete product by ID

```
Enter ID of book to delete (enter:0 ->exit): 567

ID not found! Please enter again!
Enter ID of book to delete (enter:0 ->exit): 45

ID not found! Please enter again!
Enter ID of book to delete (enter:0 ->exit): b0003
(enter:1 ->delete)__(enter:0 ->exit):
```

3. Number Testing

```
=====
===== Number_Testing =====
=====
| 1. Check Primary Number      |
| 2. Check Perfect Number     |
| 3. Check Palindrome Number  |
=====
Please enter your option (enter:0 ->exit): █
```

1.Check primary number

```
<<<<|Primary Number Checker|>>>>

Input a number: 1243
1243 is not a prime number.

Press enter to exit...
```

2.Check perfect number

```
<<<<|Perfect Number Checker|>>>>

Input a number: 2344
2344 is not a perfect number.

Press enter to exit...
```

3.Check palindrome number

```
<<<<|Palindrome Number Checker|>>>>

Input a number: 122221
122221 is a palindrome.

Press enter to exit...
█
```


4. Basic Math

```
=====
===== Basic_Math_Calculator =====
=====
| 1. Summation(+)                      |
| 2. Subtraction(-)                   |
| 3. Multiplication(x)                |
| 4. Division(/)                     |
=====
Please enter your option (enter:0 ->exit): █
```

1.Summation

```
<<<<|SUMMATION|>>>>
#1number + #2number

Enter #1number: 23.44
Enter #2number: 67
23.44 + 67 = 90.44

Press enter to exit...
```

2.Subtraction

```
<<<<|SUBTRACTION|>>>>
#1number - #2number

Enter #1number: 34
Enter #2number: 93.55
34 - 93.55 = -59.55

Press enter to exit...
█
```

3. Multiplication

```
      <<<<|MULTIPLICATION|>>>>
      #1number x #2number

Enter #1number: 0.77
Enter #2number: 23
0.77 x 23 = 17.71

Press enter to exit...
█
```

4. Division

```
      <<<<|DIVISION|>>>>
      #1number / #2number

Enter #1number: 123
Enter #2number: 0.345
123 / 0.345 = 356.522

Press enter to exit...
█
```

5. Math Suite Computation

```
=====
===== Compute_the_Math_Suite =====
=====
| 1. Suite: 1+2+3+...+n |
| 2. Suite: 1+3+5+...+n |
| 3. Suite: 1^2 + 2^2 +...+ n^2 |
| 4. Sum all primary numbers in between 1 to n |
=====
Please enter your option (enter:0 ->exit):
```

1. Suite: 1+2+3+...+n

```
<<<<|Suite: 1+2+3+...+n|>>>>

Input n: 34
Result = 595

Press enter to exit...
```

2. Suite: 1+3+5+...+n

```
<<<<|Suite: 1+3+5+...+n|>>>>

Input n: 16
Result = 64

Press enter to exit...
```

3. Suite: $1^2 + 2^2 + \dots + n^2$

```
<<<<|Suite: 1^2 + 2^2 +...+ n^2|>>>>

Input n: 7
Result = 140

Press enter to exit...
```

4. Sum all primary numbers in between 1 to n

```
<<<<|Sum all primary numbers in between 1 to n|>>>>

Input n: 66
Result = 501

Press enter to exit...
█
```

6. Number Conversion

```
=====
=====Number_Converter=====
=====
| 1. Base 2 to Base 10      |
| 2. Base 10 to Base 2     |
| 3. Base 8 to Base 10     |
| 4. Base 10 to Base 8     |
| 5. Base 10 to Base 16    |
|                           |
=====
Please enter your option (enter:0 ->exit): █
```

1.Base2 to Base10

```
<<<<|Base2 to Base10 Converter|>>>>

Input a base2 number: 1011011
The base10 number is 91

Press enter to exit...
```

2.Base10 to Base2

```
<<<<|Base10 to Base2 Converter|>>>>

Input a base10 number: 56
The base2 number is 111000
```

3.Base8 to Base10

```
<<<<|Base8 to Base10 Converter|>>>>
```

```
Input a base8 number: 556  
The base10 number is 366
```

4.Base10 to Base8

```
<<<<|Base10 to Base8 Converter|>>>>
```

```
Input a base10 number: 992  
The base8 number is 1740
```

5.Base10 to Base16

```
<<<<|Base10 to Base16 Converter|>>>>
```

```
Input a base10 number: 91  
The base16 number is 5B
```

History of Program

2	2022-07-12.19:04:00	Product_Management	createProduct
3	2022-07-12.19:08:58	Product_Management	createProduct
4	2022-07-12.19:12:36	Product_Management	displayAllProducts
5	2022-07-12.19:13:37	Product_Management	displayAllProducts
6	2022-07-12.19:13:53	Product_Management	displayProductByID
7	2022-07-12.19:14:31	Product_Management	updateProductByID
8	2022-07-12.19:17:10	Product_Management	updateProductByID
9	2022-07-12.19:19:08	Product_Management	updateProductByID
10	2022-07-12.19:20:21	Product_Management	deleteProductByID
11	2022-07-12.19:20:59	Product_Management	searchForProduct
12	2022-07-12.19:22:30	Book_Management	displayBook
13	2022-07-12.19:22:56	Book_Management	createBook
14	2022-07-12.19:31:56	Book_Management	createBook
15	2022-07-12.19:34:48	Book_Management	displayBook
16	2022-07-12.19:35:03	Book_Management	updateBookByID
17	2022-07-12.19:35:18	Book_Management	updateBookByID
18	2022-07-12.19:36:58	Book_Management	deleteBookByID
19	2022-07-12.19:38:07	Number_Testing	checkPrimary
20	2022-07-12.19:38:27	Number_Testing	checkPerfectN
21	2022-07-12.19:38:45	Number_Testing	checkPalindrome
22	2022-07-12.19:39:14	Basic_Calculator	summation
23	2022-07-12.19:39:36	Basic_Calculator	subtraction
24	2022-07-12.19:40:02	Basic_Calculator	multiplication
25	2022-07-12.19:40:25	Basic_Calculator	division
26	2022-07-12.19:43:07	Math_Suite	$1+2+3+\dots+n$
27	2022-07-12.19:43:26	Math_Suite	$1+3+5+\dots+n$
28	2022-07-12.19:43:44	Math_Suite	$1^2+2^2+\dots+n^2$
29	2022-07-12.19:43:59	Math_Suite	sumPrimaryTo_n
30	2022-07-12.19:44:25	Number_Converter	base2to10
31	2022-07-12.19:45:03	Number_Converter	base2to10
32	2022-07-12.19:45:15	Number_Converter	base10to2
33	2022-07-12.19:45:41	Number_Converter	base8to10
34	2022-07-12.19:46:05	Number_Converter	base10to8
35	2022-07-12.19:46:25	Number_Converter	base10to16
36	2022-07-12.19:47:25	Number_Converter	base10to16
37	2022-07-12.19:51:59	Product_Management	displayAllProducts
38	2022-07-12.19:52:08	Product_Management	createProduct