# 1. Addition:

```
ashithadmin@LAPTOP-OAE19R6D:~/Projects/Arbitrary_Precision_calculator_APC$ ls
APC.c  APC.h  Addition.c  Division.c  Modulus.c  Multiplication.c  Subtraction.c  a.out  main.c
ashithadmin@LAPTOP-OAE19R6D:~/Projects/Arbitrary_Precision_calculator_APC$ gcc *.c
ashithadmin@LAPTOP-OAE19R6D:~/Projects/Arbitrary_Precision_calculator_APC$ ./a.out 165348977915646587 + 56797944113265446564
|-------------------------------------------------------------------------------------------------------------|

 Addition of Two Numbers

|-------------------------------------------------------------------------------------------------------------|

 Operand-1      ->      165348977915646587

 Operator       ->      +

 Operand-2      ->      56797944113265446564

|-------------------------------------------------------------------------------------------------------------|

 Result         ->      56963293091181093151

|-------------------------------------------------------------------------------------------------------------|
ashithadmin@LAPTOP-OAE19R6D:~/Projects/Arbitrary_Precision_calculator_APC$ ./a.out -165348977915646587 + 56797944113265446564
|-------------------------------------------------------------------------------------------------------------|

 Addition of Two Numbers

|-------------------------------------------------------------------------------------------------------------|

 Operand-1      ->      -165348977915646587

 Operator       ->      +

 Operand-2      ->      56797944113265446564

|-------------------------------------------------------------------------------------------------------------|

 Result         ->      56632595135349799977

|-------------------------------------------------------------------------------------------------------------|
```

```
ashithadmin@LAPTOP-OAE19R6D:~/Projects/Arbitrary_Precision_calculator_APC$ ./a.out 165348977915646587 + -56797944113265446564
|-------------------------------------------------------------------------------------------------------------|

 Addition of Two Numbers

|-------------------------------------------------------------------------------------------------------------|

 Operand-1      ->      165348977915646587

 Operator       ->      +

 Operand-2      ->      -56797944113265446564

|-------------------------------------------------------------------------------------------------------------|

 Result         ->      -56632595135349799977

|-------------------------------------------------------------------------------------------------------------|
ashithadmin@LAPTOP-OAE19R6D:~/Projects/Arbitrary_Precision_calculator_APC$ ./a.out -165348977915646587 + -56797944113265446564
|-------------------------------------------------------------------------------------------------------------|

 Addition of Two Numbers

|-------------------------------------------------------------------------------------------------------------|

 Operand-1      ->      -165348977915646587

 Operator       ->      +

 Operand-2      ->      -56797944113265446564

|-------------------------------------------------------------------------------------------------------------|

 Result         ->      -56963293091181093151

|-------------------------------------------------------------------------------------------------------------|
```

# 2. Subtraction:

```
ashithadmin@LAPTOP-OAE19R6D:~/Projects/Arbitrary_Precision_calculator_APC$ ./a.out 165348977915646587 - 56797944113265446564
|-------------------------------------------------------------------------------------------------------------------------|

 Subtraction of Two Numbers

|-------------------------------------------------------------------------------------------------------------------------|

 Operand-1      ->      165348977915646587

 Operator       ->      -

 Operand-2      ->      56797944113265446564

|-------------------------------------------------------------------------------------------------------------------------|

 Result         ->      -56632595135349799977

|-------------------------------------------------------------------------------------------------------------------------|
ashithadmin@LAPTOP-OAE19R6D:~/Projects/Arbitrary_Precision_calculator_APC$ ./a.out -165348977915646587 - 56797944113265446564
|-------------------------------------------------------------------------------------------------------------------------|

 Subtraction of Two Numbers

|-------------------------------------------------------------------------------------------------------------------------|

 Operand-1      ->      -165348977915646587

 Operator       ->      -

 Operand-2      ->      56797944113265446564

|-------------------------------------------------------------------------------------------------------------------------|

 Result         ->      -56963293091181093151

|-------------------------------------------------------------------------------------------------------------------------|
```

```
ashithadmin@LAPTOP-OAE19R6D:~/Projects/Arbitrary_Precision_calculator_APC$ ./a.out 165348977915646587 - -56797944113265446564
|-----------------------------------------------------------------------------------------------------------|

 Subtraction of Two Numbers

|-----------------------------------------------------------------------------------------------------------|

 Operand-1      ->      165348977915646587

 Operator       ->      -

 Operand-2      ->      -56797944113265446564

|-----------------------------------------------------------------------------------------------------------|

 Result         ->      56963293091181093151

|-----------------------------------------------------------------------------------------------------------|
ashithadmin@LAPTOP-OAE19R6D:~/Projects/Arbitrary_Precision_calculator_APC$ ./a.out -165348977915646587 - -56797944113265446564
|-----------------------------------------------------------------------------------------------------------|

 Subtraction of Two Numbers

|-----------------------------------------------------------------------------------------------------------|

 Operand-1      ->      -165348977915646587

 Operator       ->      -

 Operand-2      ->      -56797944113265446564

|-----------------------------------------------------------------------------------------------------------|

 Result         ->      56632595135349799977

|-----------------------------------------------------------------------------------------------------------|
```

# 3. Multiplication:

```
ashithadmin@LAPTOP-OAE19R6D:~/Projects/Arbitrary_Precision_calculator_APC$ ./a.out 165348977915646587 x 56797944113265446564
|-------------------------------------------------------------------------------------------------------------------------|

 Multiplication of Two Numbers

|-------------------------------------------------------------------------------------------------------------------------|

 Operand-1       ->      165348977915646587

 Operator        ->      x

 Operand-2       ->      56797944113265446564

|-------------------------------------------------------------------------------------------------------------------------|

 Result          ->      9391482006838457394733812599357477068

|-------------------------------------------------------------------------------------------------------------------------|
ashithadmin@LAPTOP-OAE19R6D:~/Projects/Arbitrary_Precision_calculator_APC$ ./a.out -165348977915646587 x 56797944113265446564
|-------------------------------------------------------------------------------------------------------------------------|

 Multiplication of Two Numbers

|-------------------------------------------------------------------------------------------------------------------------|

 Operand-1       ->      -165348977915646587

 Operator        ->      x

 Operand-2       ->      56797944113265446564

|-------------------------------------------------------------------------------------------------------------------------|

 Result          ->      -9391482006838457394733812599357477068

|-------------------------------------------------------------------------------------------------------------------------|
```

```
ashithadmin@LAPTOP-OAE19R6D:~/Projects/Arbitrary_Precision_calculator_APC$ ./a.out -165348977915646587 x -56797944113265446564
|-------------------------------------------------------------------------------------------------------------------------|

 Multiplication of Two Numbers

|-------------------------------------------------------------------------------------------------------------------------|

 Operand-1       ->      -165348977915646587

 Operator        ->      x

 Operand-2       ->      -56797944113265446564

|-------------------------------------------------------------------------------------------------------------------------|

 Result          ->      9391482006838457394733812599357477068

|-------------------------------------------------------------------------------------------------------------------------|
```

# 4. Division:

```
ashithadmin@LAPTOP-OAE19R6D:~/Projects/Arbitrary_Precision_calculator_APC$ ./a.out 165348977915646587 / 56797944113265446564
|-------------------------------------------------------------------------------------------------------------------------|

 Division of Two Numbers

|-------------------------------------------------------------------------------------------------------------------------|

 Operand-1      ->      165348977915646587

 Operator       ->      /

 Operand-2      ->      56797944113265446564

|-------------------------------------------------------------------------------------------------------------------------|

 Result         ->      0

|-------------------------------------------------------------------------------------------------------------------------|
```

```
ashithadmin@LAPTOP-OAE19R6D:~/Projects/Arbitrary_Precision_calculator_APC$ ./a.out -100000000 / 3
|-------------------------------------------------------------------------------------------------------------------------|

 Division of Two Numbers

|-------------------------------------------------------------------------------------------------------------------------|

 Operand-1      ->      -100000000

 Operator       ->      /

 Operand-2      ->      3

|-------------------------------------------------------------------------------------------------------------------------|

 Result         ->      -33333333

|-------------------------------------------------------------------------------------------------------------------------|
ashithadmin@LAPTOP-OAE19R6D:~/Projects/Arbitrary_Precision_calculator_APC$ ./a.out -100000000 / -3
|-------------------------------------------------------------------------------------------------------------------------|

 Division of Two Numbers

|-------------------------------------------------------------------------------------------------------------------------|

 Operand-1      ->      -100000000

 Operator       ->      /

 Operand-2      ->      -3

|-------------------------------------------------------------------------------------------------------------------------|

 Result         ->      33333333

|-------------------------------------------------------------------------------------------------------------------------|
```

# 5. Modulus:

```
ashithadmin@LAPTOP-OAE19R6D:~/Projects/Arbitrary_Precision_calculator_APC$ ./a.out 165348977915646587 % 56797944113265446564
|-------------------------------------------------------------------------------------------------------------------------|

 Modulus of Two Numbers

|-------------------------------------------------------------------------------------------------------------------------|

 Operand-1      ->      165348977915646587

 Operator       ->      %

 Operand-2      ->      56797944113265446564

|-------------------------------------------------------------------------------------------------------------------------|

 Result         ->      165348977915646587

|-------------------------------------------------------------------------------------------------------------------------|
```

```
ashithadmin@LAPTOP-OAE19R6D:~/Projects/Arbitrary_Precision_calculator_APC$ ./a.out -100000000 % 3
|-------------------------------------------------------------------------------------------------------------------------|

 Modulus of Two Numbers

|-------------------------------------------------------------------------------------------------------------------------|

 Operand-1      ->      -100000000

 Operator       ->      %

 Operand-2      ->      3

|-------------------------------------------------------------------------------------------------------------------------|

 Result         ->      -1

|-------------------------------------------------------------------------------------------------------------------------|
```

```
ashithadmin@LAPTOP-OAE19R6D:~/Projects/Arbitrary_Precision_calculator_APC$ ./a.out 100000000 % -3
|-------------------------------------------------------------------------------------------------------------------------|

 Modulus of Two Numbers

|-------------------------------------------------------------------------------------------------------------------------|

 Operand-1      ->      100000000

 Operator       ->      %

 Operand-2      ->      -3

|-------------------------------------------------------------------------------------------------------------------------|

 Result         ->      1

|-------------------------------------------------------------------------------------------------------------------------|
```

```
ashithadmin@LAPTOP-OAE19R6D:~/Projects/Arbitrary_Precision_calculator_APC$ ./a.out -100000000 % -3
|-------------------------------------------------------------------------------------------------------------------------|

 Modulus of Two Numbers

|-------------------------------------------------------------------------------------------------------------------------|

 Operand-1      ->      -100000000

 Operator       ->      %

 Operand-2      ->      -3

|-------------------------------------------------------------------------------------------------------------------------|

 Result         ->      -1

|-------------------------------------------------------------------------------------------------------------------------|
```

# 6. Error Handling:

```
ashithadmin@LAPTOP-OAE19R6D:~/Projects/Arbitrary_Precision_calculator_APC$ ./a.out

--------------------------------------------------------------------------------


ERROR: ./a.out : INVALID ARGUMENTS
USAGE:
Addition        : ./a.out <operand1> < operator ( + )   > <operand2>
Subtraction     : ./a.out <operand1> < operator ( - )   > <operand2>
Multiplication  : ./a.out <operand1> < operator ( x/X ) > <operand2>
Division        : ./a.out <operand1> < operator ( / )   > <operand2>
Modulus         : ./a.out <operand1> < operator ( % )   > <operand2>

--------------------------------------------------------------------------------
```

```
ashithadmin@LAPTOP-OAE19R6D:~/Projects/Arbitrary_Precision_calculator_APC$ ./a.out 146648616845444 / 0
ERROR: Cannot divide by zero(0).
ERROR: Division Failed!
ashithadmin@LAPTOP-OAE19R6D:~/Projects/Arbitrary_Precision_calculator_APC$ ./a.out 146648616845444 % 0
Error: modulus 0 is not possible.
ERROR: Modulus Failed!
```

```
ashithadmin@LAPTOP-OAE19R6D:~/Projects/Arbitrary_Precision_calculator_APC$ ./a.out 14664861684544 = 654643141

--------------------------------------------------------------------------------------------------

ERROR: ./a.out 14664861684544 = 654643141 : INVALID ARGUMENTS
USAGE:
Addition        : ./a.out <operand1> < operator ( + )   > <operand2>
Subtraction     : ./a.out <operand1> < operator ( - )   > <operand2>
Multiplication  : ./a.out <operand1> < operator ( x/X ) > <operand2>
Division        : ./a.out <operand1> < operator ( / )   > <operand2>
Modulus         : ./a.out <operand1> < operator ( % )   > <operand2>

--------------------------------------------------------------------------------------------------
```

```
ashithadmin@LAPTOP-OAE19R6D:~/Projects/Arbitrary_Precision_calculator_APC$ ./a.out -146-6486th1684544 + 654+6s43141

--------------------------------------------------------------------------------------------

ERROR: ./a.out -146-6486th1684544 + 654+6s43141 : INVALID ARGUMENTS
USAGE:
Addition        : ./a.out <operand1> < operator ( + )   > <operand2>
Subtraction     : ./a.out <operand1> < operator ( - )   > <operand2>
Multiplication  : ./a.out <operand1> < operator ( x/X ) > <operand2>
Division        : ./a.out <operand1> < operator ( / )   > <operand2>
Modulus         : ./a.out <operand1> < operator ( % )   > <operand2>

--------------------------------------------------------------------------------------------
```