

```
34     int Ia = 9, Ib = 8;
35     double Da = 5.7, Db = 2.2;
36     bool flag = true;
37
38     std::cout << "multiply(int, int) (first case): " << multiply
39     std::cout << "multiply(double, double)(second case): " << m
40     std::cout << "multiply(int, double, bool) (third case, round
41
42     return 0;
43 }
```

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS

COMMENTS

```
PS C:\Users\Papu\C_plusplus25> & 'c:\Users\Papu\.vscode\extensions\ms-vsco
gine-In-wvr4mmmn.3rq' '--stdout=Microsoft-MIEngine-Out-ifd0jrvb.kib' '--sto
=C:/msys64/ucrt64/bin/gdb.exe' '--interpreter=mi'
multiply(int, int) (first case): 72
multiply(double, double)(second case): 12.54
multiply(int, double, bool) (third case, rounded integer): 51
PS C:\Users\Papu\C_plusplus25>
```

```
MIEngine-Error-mmkvb5a5.tx5' '--pid=Microsoft-MIEngine-Pid-qxo1wz  
lb.urv' '--dbgExe=C:/msys64/ucrt64/bin/gdb.exe' '--interpreter=mi  
,
```

Enter first floating point number (a): 1

Enter second floating point number (b): 2

First swap a = 2, b = 1

After swap without pointers or references: a = 1, b = 2

Pointer swap a = 2, b = 1

After swap using pointers: a = 2, b = 1

Reference swap a = 1, b = 2

After swap using references: a = 1, b = 2

PS C:\Users\Papu\C_plusplus25>

```
18     double calculate(double a, double b, char op) {
19         switch (op) {
20             case '+':
21                 return a + b;
22             case '-':
23                 return a - b;
24             case '*':
25                 return a * b;
26             case '/':
27                 if (b != 0) {
28                     return a / b;
```

PROBLEMS

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```
PS C:\Users\Papu\C_plusplus25> & 'c:\Users\Papu\.vscode\extensions\ms-
gine-In-mfegvs2c.hqz' '--stdout=Microsoft-MIEngine-Out-fcq3kjh.kdl' '-
=C:/msys64/ucrt64/bin/gdb.exe' '--interpreter=mi'
```

Enter first number: 7

Enter second number: 9

Enter operator (+, -, *, /): *

Result: 63

```
PS C:\Users\Papu\C_plusplus25> ^C
```

```
PS C:\Users\Papu\C_plusplus25>
```

```
PS C:\Users\Papu\C_plusplus25> & 'c:\Users\Papu\.vscode\extensions\ms-
gine-In-ko42o4cr.2bq' '--stdout=Microsoft-MIEngine-Out-hidfrk2n.zim' '-
=C:/msys64/ucrt64/bin/gdb.exe' '--interpreter=mi'
```

Enter first number: 9

Enter second number: 10

Enter operator (+, -, *, /): +

Result: 19

```
PS C:\Users\Papu\C_plusplus25> █
```

```
PS C:\Users\Papu\Cplusplus25> & 'c:\Users\Papu\.vscode\extensions\ms-vscode  
gine-In-0vvxerq5.btw' '--stdout=Microsoft-MIEngine-Out-2y1o0btm.puu' '--stde  
=C:/msys64/ucrt64/bin/gdb.exe' '--interpreter=mi'
```

Positive number gets squared negative stops the program and 0 gets ignored

Input number: 8

Square of 8 is 64

Input number: 2

Square of 2 is 4

Input number: 0

Input number: 1

Square of 1 is 1

Input number: -2

Program ended because of a negative input

```
PS C:\Users\Papu\Cplusplus25> □
```

```
15
16     for (int i=0;i<SIZE;i++) {
17         RevArr[SIZE-1-i]=*ptr+i;}
18
19     cout<<"Check original array: ";
20     for(int i=0; i<SIZE; i++){
21         cout<<OrigArr[i]<<" ";}
22     cout<<endl;
23
24     cout<<"Check reversed array: ";
25     for(int i=0; i<SIZE; i++){
26         cout<<RevArr[i]<<" ";}
27     cout<<endl;
28     return 0;
```

PROBLEMS

OUTPUT

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CONSOLE

```
PS C:\Users\Papu\C_plusplus25> & 'c:\Users\Papu\.vscode\code-
engine-In-0qkvrej2ul' '--stdout=Microsoft-MIEngine-Out-j
=C:/msys64/ucrt64/bin/gdb.exe' '--interpreter=mi'
```

```
Check original array: 1 2 3 4 5 6 7 8
```

```
Check reversed array: 8 7 6 5 4 3 2 1
```

```
PS C:\Users\Papu\C_plusplus25> ^C
```

```
PS C:\Users\Papu\C_plusplus25>
```

```
PS C:\Users\Papu\C_plusplus25> & 'c:\Users\Papu\.vscode\code-
engine-In-ncnq2xyv.21r' '--stdout=Microsoft-MIEngine-Out-2
=C:/msys64/ucrt64/bin/gdb.exe' '--interpreter=mi'
```

```
Check original array: 18 19 20 21 22 23 24 25
```

```
Check reversed array: 25 24 23 22 21 20 19 18
```

```
PS C:\Users\Papu\C_plusplus25> □
```

Choose an option:

- 1) Add a student
- 2) Display all students
- 3) Search for a student by ID
- 4) Exit the program

Enter option: 1

Enter student name: Max

Enter student ID: 88

Enter student grade: 4.2

Choose an option:

- 1) Add a student
- 2) Display all students
- 3) Search for a student by ID
- 4) Exit the program

Enter option: 1

Enter student name: Dan

Enter student ID: 96

Enter student grade: 4

Choose an option:

- 1) Add a student
- 2) Display all students
- 3) Search for a student by ID
- 4) Exit the program

Enter option: 2

List of students:

Name: Max, ID: 88, Grade: 4.2

Name: Dan, ID: 96, Grade: 4

Choose an option:

- 1) Add a student
- 2) Display all students
- 3) Search for a student by ID
- 4) Exit the program

Enter option: 3

Enter student ID to search: 96

Student info -- Name: Dan, ID: 96, Grade: 4

Choose an option:

- 1) Add a student
- 2) Display all students
- 3) Search for a student by ID
- 4) Exit the program

Enter option: 0

Error, not a valid operator

Choose an option:

- 1) Add a student
- 2) Display all students
- 3) Search for a student by ID
- 4) Exit the program

Enter option: 4

Exiting the program.

PS C:\Users\Papu\C_plusplus25>

Initial addresses of p1: 0x7ff707643000
and p2: 0x7ff707643000

Initial values of p1: 123
and p2: 123

After changing value with p1 -> addresses p1: 0x7ff707643000
and p2: 0x7ff707643000

After changing p1-> value of p1: 234
and p2: 234

After changing value with p2 -> addresses p1: 0x7ff707643000
and p2: 0x7ff707643000

After changing p2-> value of p1: 345
and p2: 345

C:/msys64/ucrt64/bin/gdb.exe --1f

Before changing refA: a = 100

After changing refA: a = 30

PS C:\Users\Papu\C_plusplus25>