

# Week-02-Operators and Expressions,Managing Input and Output Operations

## Week-02-01-Practive Session-coding

ROLL NO: 241801294

NAME: THARUN N

Q1)

Status

Finished

Started

Monday, 23 December 2024, 5:33 PM

Completed

Wednesday, 16 October 2024, 4:58 PM

Duration

68 days

Question 1

Correct

Marked out of 3.00

Flag question

Many people think about their height in feet and inches, even in some countries that primarily use the metric system. Write a program that reads a number of feet from the user, followed by a number of inches. Once these values are read, your program should compute and display the equivalent number of centimeters.

Hint:

One foot is 12 inches.

One inch is 2.54 centimeters.

Input Format

First line,read the number of feet.

Second line, read the number of inches.

Output Format

In one line print the height in centimeters.

Note: All of the values should be displayed using two decimal places.

Sample Input 1

5 6

Sample Output 1

167.64

**Answer:** (penalty regime: 0 %)

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int f,i;float foot,inches,centi;
5     scanf("%d %d",&f,&i);
6     foot=30.48*f;
7     inches=2.54*i;
8     centi=foot+inches;
9     printf("%.2f",centi);
10    return 0;
11 }
```

	Input	Expected	Got	
✓	5	167.64	167.64	✓
	6			

Passed all tests! ✓

Q2)

Question 2

Correct

Marked out of 5.00

Flag question

Create a program that reads two integers, a and b, from the user. Your program should compute and display: • The sum of a and b • The difference when b is subtracted from a • The product of a and b • The quotient when a is divided by b • The remainder when a is divided by b

Input Format

First line, read the first number.

Second line, read the second number.

Output Format

First line, print the sum of a and b

Second line, print the difference when b is subtracted from a

Third line, print the product of a and b

Fourth line, print the quotient when a is divided by b

Fifth line, print the remainder when a is divided by b

Sample

Input 1 100 6

Sample Output

106 94 600 16 4

Answer: (penalty regime: 0 %)

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int num1,num2;
5     scanf("%d", &num1);
6     scanf("%d", &num2);
7     int sum = num1 + num2;
8     int dif = num1 - num2;
9     int mul = num1 * num2;
10    int div_ = num1 / num2;
11    int mod = num1 % num2;
12    printf("%d\n%d\n%d\n%d\n", sum,dif,mul,div_,mod);
13    return 0;
14 }
```

	Input	Expected	Got	
✓	100	106	106	✓
	6	94	94	
		600	600	
		16	16	
		4	4	

Passed all tests! ✓

Question 3

Correct

Marked out of 7.00

Flag question

A bakery sells loaves of bread for \$3.49 each. Day old bread is discounted by 60 percent. Write a program that begins by reading the number of loaves of day old bread being purchased from the user. Then your program should display the regular price for the bread, the discount because it is a day old, and the total price. Each of these amounts should be displayed on its own line with an appropriate label. All of the values should be displayed using two decimal places.

Input Format

Read the number of day old loaves.

Output Format

First line, print Regular price: price

Second line, print Discount: discount

Third line, print Total: total

Note: All of the values should be displayed using two decimal places.

Sample Input 1

10

Sample Output 1

Regular price: 34.90

Discount: 20.94

Total: 13.96

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main ()
3 {
4     float count,discountprice,regprice,disprice,finalprice;
5     scanf("%f", &count);
6     discountprice = (3.49*(60.0/100.0));
7     regprice = count*3.49;
8     disprice = count*discountprice;
9     finalprice = regprice-disprice;
10    printf("Regular price: %.2f\nDiscount: %.2f\nTotal: %.2f",regprice,disprice,finalprice);
11    return 0;
12 }
```

	Input	Expected	Got	
✓	10	Regular price: 34.90 Discount: 20.94 Total: 13.96	Regular price: 34.90 Discount: 20.94 Total: 13.96	✓

Passed all tests! ✓

# Week-02-02-Practive Session-coding

ROLL NO: 241801294

NAME: THARUN N

Q1)

Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
Completed	Wednesday, 23 October 2024, 2:10 PM
Duration	61 days 3 hours

Question 1

Correct

Marked out of 3.00

Flag question

Goki recently had a breakup, so he wants to have some more friends in his life. Goki has N people who he can be friends with, so he decides to choose among them according to their skills set  $Y_i(1 \leq i \leq n)$ . He wants atleast X skills in his friends. Help Goki find his friends. \_\_\_\_\_

INPUT

First line contains a single integer X - denoting the minimum skill required to be Goki's friend. Next line contains one integer Y - denoting the skill of the person

\_\_\_\_\_

OUTPUT

Print if he can be friend with Goki. 'YES' (without quotes) if he can be friends with Goki else 'NO' (without quotes).

\_\_\_\_\_

CONSTRAINTS

$1 \leq N \leq 1000000$

$1 \leq X, Y \leq 1000000$

SAMPLE INPUT 1

100 110

SAMPLE OUTPUT 1

YES

SAMPLE INPUT 2

100 90

SAMPLE OUTPUT 2

NO

Answer: (penalty regime: 0 %)

```
1 #include <stdio.h>
2
3 int main() {
4     int a, b;
5     scanf("%d", &a);
6     scanf("%d", &b);
7
8     (a > b)? printf("NO") : printf("YES");
9
10 }
```

	Input	Expected	Got	
✓	100 110	YES	YES	✓
✓	100 90	NO	NO	✓

Passed all tests! ✓

Q2)

Question 2

Correct

Marked out of 5.00

Flag question

Before the outbreak of corona virus to the world, a meeting happened in a room in Wuhan. A person who attended that meeting had COVID-19 and no one in the room knew about it! So everyone started shaking hands with everyone else in the room as a gesture of respect and after meeting unfortunately everyone got infected! Given the fact that any two persons shake hand exactly once, Can you tell the total count of handshakes happened in that meeting? Say no to shakehands. Regularly wash your hands. Stay Safe.

Input Format

Read an integer N,the total number of people attended that meeting.

Output Format

Print the number of handshakes.

Constraints

$0 < N < 106$

SAMPLE INPUT 1

1

SAMPLE OUTPUT

0

SAMPLE INPUT 2

2

SAMPLE OUTPUT 2

1

Explanation Case 1: The lonely board member shakes no hands, hence 0. Case 2: There are 2 board members, 1 handshake takes place.

**Answer:** (penalty regime: 0 %)

**Answer:** (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int N;
5     scanf("%d",&N);
6     N=N*(N-1)/2;
7     printf("%d\n", N);
8 }
```

	Input	Expected	Got	
✓	1	0	0	✓
✓	2	1	1	✓

Passed all tests! ✓

Q3)

Question 3

Correct

Marked out of 7.00

Flag question

In our school days, all of us have enjoyed the Games period. Raghav loves to play cricket and is Captain of his team. He always wanted to win all cricket matches. But only one last Games period is left in school now. After that he will pass out from school. So, this match is very important to him. He does not want to lose it. So he has done a lot of planning to make sure his teams wins. He is worried about only one opponent - Jatin, who is very good batsman. Raghav has figured out 3 types of bowling techniques, that could be most beneficial for dismissing Jatin. He has given points to each of the 3 techniques. You need to tell him which is the maximum point value, so that Raghav can select best technique. 3 numbers are given in input. Output the maximum of these numbers.

Input:

Three space separated integers.

Output:

Maximum integer value

SAMPLE INPUT

8 6 1

SAMPLE OUTPUT

8

Explanation Out of given numbers, 8 is maximum.

Answer: (penalty regime: 0 %)

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int a, b, c;
5     scanf("%d", &a);
6     scanf("%d", &b);
7     scanf("%d", &c);
8     if(a>b && a > c){
9         printf("%d", a);
10    }
11    if(b>a && b > c){
12        printf("%d", b);
13    }
14    if(c>a && c > b){
15        printf("%d", c);
16    }
17 }
```

	Input	Expected	Got	
✓	81 26 15	81	81	✓

Passed all tests! ✓

Arithmetic Operators-Optional

ROLL NO: 241801294

NAME: THARUN N

Q1)

Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
Completed	Wednesday, 23 October 2024, 2:50 PM
Duration	61 days 2 hours

Question 1

Correct

Marked out of 1.00

Flag question

An operator is a special symbol used to **manipulate data**. The data items that the operators act upon are called operands.

The operator that works on a single operand is called a unary operator and that which works on two operands is known as a binary operator.

C provides many types of operators. They are: Arithmetic, Unary, Relational and equality, Logical, Assignment, Conditional, Bitwise and Special operators.

In C, we have 5 arithmetic operators:

Operator Description

- + Used for addition
- Used for subtraction
- \* Used for multiplication
- / Used for division
- % Remainder/Modulus operator for finding remainder

**Arithmetic operators** are applied on **numeric operands**. Thus the operands can be **integers, floats** or **characters** (Since a character is internally represented by its numeric code).

The **remainder operator** (%) requires that both the operands be **integers** and the second operand be **non-zero**. Similarly the **division operator** (/) requires that the second operand be **non-zero**.

The format for usage of arithmetic operator is as follows:  
`operand1operatoroperand2`

According to the **coding** conventions in C, a single space should be provided to the left and to the right of an operator.

The table given below demonstrates the use of various **arithmetic operators** using two variables num1 and num2 of type int with values 10 and 3 respectively:

**Expression      Result**

num1 + num2 13  
num1 - num2 7  
num1 \* num2 30  
num1 / num2 3  
num1 % num2 1

Read the code given below to understand the usage of **arithmetic operators**. Retype in the space provided.

```
#include <stdio.h>

int main()
{
    int num1 = 10, num2 = 3;
    printf("Addition Result = %d\n", (num1 + num2));
    printf("Subtraction Result = %d\n", (num1 - num2));
    printf("Multiplication Result = %d\n", (num1 * num2));
    printf("Division Result = %d\n", (num1 / num2));
    printf("Remainder = %d", (num1 % num2));
    return 0;
}
```

**Answer:** (penalty regime: 0 %)

**Answer:** (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int num1 = 10, num2 = 3;
5     printf("Addition Result = %d\n", (num1 + num2));
6     printf("Subtraction Result = %d\n", (num1 - num2));
7     printf("Multiplication Result = %d\n", (num1*num2));
8     printf("Division Result = %d\n", (num1/num2));
9     printf("Remainder = %d", (num1%num2));
10    return 0;
11 }
```

	Expected	Got	
✓	Addition Result = 13 Subtraction Result = 7 Multiplication Result = 30 Division Result = 3 Remainder = 1	Addition Result = 13 Subtraction Result = 7 Multiplication Result = 30 Division Result = 3 Remainder = 1	✓

Passed all tests! ✓



Question **2**

Correct

Marked out of 1.00

Flag question

**Division** of one integer by another integer is referred to as **integer** division. This operation always results in an integer with truncated quotient.

If a **division** operation is carried out with two **floating point numbers** or with one **floating point number** and one **integer**, the result will be a **floating point quotient**.

The table given below demonstrates the usage of various **arithmetic operators** using two variables num1 and num2 of type float with values 12.5 and 2.0 respectively:

Expression	Result
num1 + num2	14.500000
num1 - num2	10.500000
num1 * num2	25.000000
num1 / num2	6.250000

Note that the **remainder operator** (%) is not applicable for **floating point numbers**.

In the program given below, type the missing code to find the **result** of applying different **arithmetic operators** on **floating point numbers**.

**Answer:** (penalty regime: 0 %)

Reset answer

```

1  #include <stdio.h>
2
3  int main()
4  {
5      float num1 = 12.5, num2 = 2.0;
6      printf("Result of addition = %f\n", (num1 + num2));
7      printf("Result of subtraction = %f\n", (num1 - num2));
8      printf("Result of multiplication = %f\n", (num1 * num2));
9      printf("Result of division = %f\n", (num1 / num2));
10     return 0;
11 }
```

	Expected	Got	
✓	Result of addition = 14.500000 Result of subtraction = 10.500000 Result of multiplication = 25.000000 Result of division = 6.250000	Result of addition = 14.500000 Result of subtraction = 10.500000 Result of multiplication = 25.000000 Result of division = 6.250000	✓

Passed all tests! ✓

Question 3

Correct

Marked out of  
1.00

Flag question

The table given below demonstrates the use of various **arithmetic operators** using two variables c1 and c2 of type char with values 'A' and 'D' respectively:

Expression	Result
c1	65
c1 + c2	133
c1 + c2 + 5	138
c1 + c2 + '5'	186

In the above examples, the character 'A' is substituted with its **ASCII value 65** and 'D' is substituted with 68. The character '5' is substituted with its **ASCII value 53**. The integer value 5 is used as it is.

The following table demonstrates the usage of various **arithmetic operators** using two variables a and b of type int with values 11 and -3 respectively:

Expression	Result
a + b	8
a - b	14
a * b	-33
a / b	-3
a % b	2

In the program given below, type the missing code to find the **result** of applying different **arithmetic operators** on **char** data type values.

Answer: (penalty regime: 0 %)

Reset answer

```

1 #include <stdio.h>
2
3 int main()
4 {
5     char c1 = 'A', c2 = 'D';
6     printf("c1 = %d\n", c1);
7     printf("c1 + c2 = %d\n", (c1 + c2));
8     printf("c1 + c2 + 5 = %d\n", (c1 + c2 + 5));
9     printf("Result = %d", (c1 + c2 + '5'));
10    return 0;
11 }
```

	Expected	Got	
✓	c1 = 65 c1 + c2 = 133 c1 + c2 + 5 = 138 Result = 186	c1 = 65 c1 + c2 = 133 c1 + c2 + 5 = 138 Result = 186	✓

Passed all tests! ✓

## Coding-Comment Lines and Tokens-Optional

ROLL NO: 241801294

Q1)

Status

Finished

Started

Monday, 23 December 2024, 5:33 PM

Completed

Saturday, 26 October 2024, 8:35 AM

Duration

58 days 8 hours

Question 1

Correct

Marked out of 1.00

Flag question

Make the following changes in the code given below:

1. Comment the statement which prints "Mango".

2. Remove the comment on the statement which prints "Banana".

Answer: (penalty regime: 0 %)

Reset answer

1

#include <stdio.h>

2

3

int main()

4

{

5

printf("Orange\n");

6

printf("Banana");

7

return 0;

8

}

	Expected	Got	
✓	Orange	Orange	✓
	Banana	Banana	

Passed all tests! ✓

Q2)

Question 2

Correct

Marked out of 1.00

Flag question

As mentioned earlier, a computer program is a collection of instructions or statements.

A C program usually consists of multiple statements.

Each statement is composed of one or more of the **three** given below:

1. Comments

2. Whitespace characters

3. Tokens

In a computer program, a comment is used to mark a section of code as non-executable.

Comments are mainly used for two purposes:

1. To mark a section of executable code as non-executable, so that the compiler ignores it during compilation.

2. To provide remarks or an explanation on the working of the given section of code in plain English, so that a fellow programmer can read and understand the code.

In C, there are two types of comments:

1. **end-of-line comment** : It starts with //. The content that follows the // and continues till the end of that line is a comment. It is also called as **single-line comment**.

2. **traditional comment** : It starts with /\* and ends with \*/. The content between /\* and \*/ is the comment. It is also called as **multi-line comment**.

The code given below shows the two types of comments:

```
/*
C programming language was developed by Dennis Ritchie.
This is called a header comment which is used to describe
what this program would do. As you can notice the comment is
spanning across multiple lines.
*/

#include <stdio.h>
```

```
int main()
{
    int num1 = 10, num2 = 20;
    printf("sum of two numbers = %d", num1 + num2);
    return 0;
} //end of the main() function - this is an example of a end-of-line comment
```

Read the code given below to understand the different types of comments. Retype in the space provided.

**Given below are 3 important points regarding comments:**

1. There **should not** be any space between the two forward slashes in //, i.e., / / is incorrect. Similarly, there should not be any space between the **slash** and **star** characters in /\* and \*/, i.e., / \* and \* / are incorrect.
2. **Comments do not nest**, i.e., /\* and \*/ comment has no special meaning inside a // comment. Similarly, a // comment has no special meaning inside a /\* comment.
3. One should not write comments inside **character literals** (i.e., characters enclosed between single-quotes). Comments inside **String literals** (i.e., text enclosed between double-quotes) are treated as part of the String's content.

Content to be reproduced

```
/*
This is a sample C program
developed by REC
*/
#include <stdio.h>

int main()
{
    // this is an end of line comment
    printf("I love C Language!");
    return 0;
}
```

**Answer:** (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     //this is am end of line comment
5     printf("I love C Language!");
6     return 0;
7 }
```

	Expected	Got	
✓	I love C Language!	I love C Language!	✓

Passed all tests! ✓

Q3)

Question **3**  
 Correct  
 Marked out of 1.00  
 Flag question

In **C**, the backslash character `\` is used to mark an **escape sequence**. An **Escape Sequence** is an escape character `\` followed by a normal character. For example: `\n` or `\t`.

The presence of the escape character changes the meaning of the character which follows it. For example, when the string literal `"Hello\tWorld"` is printed, the result is seen as

Hello      World

In the string literal `"Hello\tWorld"`, `\t` represents the **TAB** character.

Similarly, if we want to print a **double quote** inside a double-quoted string literal, we need to escape the **double quote** by using the escape character `\`. For example :

```
printf("Hello \" (Quote)");
```

The code given above will produce the following output:  
 Hello " (Quote)

- Given below are a few points regarding **escape sequences**:
- Each escape sequence has a unique **ASCII** value as shown in the table given below.
  - Each and every combination of an escape sequence starts with backslash `\`.
  - Although an escape sequence consists of two characters, it represents a single special character in the given context.

Escape sequences and their **ASCII** codes:

Character	Bell	Backspace	Horizontal tab	Vertical tab	New line	Form feed	Carriage return	Double Quotation	Single Quotation	Question mark	Backslash	Null
Escape Sequence	<code>\a</code>	<code>\b</code>	<code>\t</code>	<code>\v</code>	<code>\n</code>	<code>\f</code>	<code>\r</code>	<code>\"</code>	<code>\'</code>	<code>\?</code>	<code>\</code>	<code>\0</code>
ASCII value	007	008	009	011	010	012	013	034	039	063	092	000

Read the code given below and retype in the space provided. **Note** the effects of `\t` and `\n` in the resulting output when executed successfully.

Content to be reproduced

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

```
#include <stdio.h>

int main()
{
    printf("One Two");
    printf("Three\n");
    printf("Four\nFive\n");
    return 0;
}
```

**Answer:** (penalty regime: 0 %)

1
2
3
4
5
6
7
8

```
#include<stdio.h>
int main()
{
    printf("One Two");
    printf("Three\n");
    printf("Four\nFive\n");
    return 0;
}
```

	Expected	Got	
✓	One TwoThree Four Five	One TwoThree Four Five	✓

Passed all tests! ✓

Question **4**  
Correct  
Marked out of 1.00  
[Flag question](#)

The code given below contains text that prints "**DennisRitchieBrianKernighan**".

Make the suggested changes to the code so that it prints "**DennisRitchieBrianKernighan**" as shown below.

Dennis Ritchie  
Brian Kernighan

To make the required changes, follow the steps given below to introduce the SPACE character and the \n new line character appropriately:

1. Insert a space between "Dennis" and "Ritchie". Make sure that no extra space or any other character apart from space are inserted.
2. Insert a \n between "Ritchie" and "Brian" Make sure that no extra space or any other character apart from \n are inserted.
3. Insert a space between "Brian" and "Kernighan". Make sure that no extra space or any other character apart from space are inserted.

**Answer:** (penalty regime: 0 %)

Reset answer

Reset answer

```
1 #include <stdio.h>
2
3 int main()
4 {
5     printf("Dennis Ritchie\nBrian Kernighan");
6     return 0;
7 }
```

Reset answer

```
1 #include <stdio.h>
2
3 int main()
4 {
5     printf("Dennis Ritchie\nBrian Kernighan");
6     return 0;
7 }
```

## Coding-Variables and Keywords

ROLL NO: 241801294

NAME: THARUN N

Q1)

Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
Completed	Saturday, 26 October 2024, 8:40 AM
Duration	58 days 8 hours

Question 1

Correct

Marked out of 1.00

Flag question

Read the code given below to learn naming conventions in identifiers.

For example, consider the program given below:

```
#include <stdio.h>

int main()
{
    int age = 2; // age is an integer variable

    int firstNumber = 2; // firstNumber is an integer variable

    // If there are two or more words in an identifier/variable - User can also use "camel case" style to declare a

    int second_number = 3; // second_number is an integer variable

    // Any space cannot be used between two words of an identifier/variable; User can use underscore (_) instead of

    int _i_am_also_a_valid_identifier = 4; // _i_am_also_a_valid_identifier is an integer variable

    // An identifier/variable name must be start with an alphabet or underscore (_) only, no other special character

    printf("age = %d\n", age);
    printf("firstNumber = %d\n", firstNumber);
    printf("second_number = %d\n", second_number);
    printf("_i_am_also_a_valid_identifier = %d\n", _i_am_also_a_valid_identifier);
    return 0;
}
```

Fill in the missing code in the below program to print the values of the given variables.

Answer: (penalty regime: 0 %)

Reset answer

```
1 #include <stdio.h>
2
3 int main()
4 {
5     int age = 2;
6     int firstNumber = 2;
7     int second_number = 3;
8     int _i_am_also_a_valid_identifier = 4;
9     printf("age = %d\n", age);
10    printf("firstNumber = %d\n", firstNumber); // Fill in the missing code
11    printf("second_number = %d\n", second_number); // Fill in the missing code
12    printf("_i_am_also_a_valid_identifier = %d\n", _i_am_also_a_valid_identifier); // Fill in the missing code
13    return 0;
14 }
```

	Expected	Got	
✓	age = 2 firstNumber = 2 second_number = 3 _i_am_also_a_valid_identifier = 4	age = 2 firstNumber = 2 second_number = 3 _i_am_also_a_valid_identifier = 4	✓

Passed all tests! ✓

Coding-Syntax of main() function

Q1)

Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
Completed	Saturday, 26 October 2024, 8:44 AM
Duration	58 days 8 hours

Question 1

Correct

Marked out of 1.00

Flag question

In C programming language, execution of the code starts with a `function` called `main`.

We shall learn more about functions in the later sections. For now, we can safely assume that **function** is the name given to a set of one or more executable statements. `main()` is a **user defined function**, i.e., a user (a programmer) writes the code for the `main()` function.

While executing a C program, the **Operating System (OS)** only calls the `main()` function in that program.

When the **OS** executes a program, the program usually returns an integer value 0 if the execution of that program is successful.

In C, **main()** can be written in such a way that it returns a an int.

```
#include <stdio.h>

int main()
{
    printf("Sample main() function with int as return type!");
    return 0; // 0 value indicates that the execution is successful
}
```

If the programmer does not specify any return type, the return type is by default considered as int.

The name of the `main()` function should always be in lowercase, i.e., if a function is written as `Main()`, it is not the main function which is called by the **OS**.

Read the code given below to familiarize yourself with the syntax of `main()` function. Retype in the space provided.

Read the code given below to familiarize yourself with the syntax of `main()` function. Retype in the space provided.

```
#include <stdio.h>

int main()
{
    printf("Impossible is nothing!");
    return 0;
}
```

Answer: (penalty regime: 0 %)

1	#include<stdio.h>	
2	int main()	
3	{	
4	printf("Impossible is nothing!");	
5	return 0;	
6	}	

	Expected	Got	
✓	Impossible is nothing!	Impossible is nothing!	✓

Passed all tests! ✓

Q2)



Question **2**

Correct

Marked out of 1.00

Flag question

Identify and correct the error in the code given below.

**Answer:** (penalty regime: 0 %)

Reset answer

```
1 #include <stdio.h>
2
3 int main()
4 {
5     printf("Hello, # is a preprocessor in C");
6     return 0;
7 }
```

	Expected	Got	
✓	Hello, # is a preprocessor in C	Hello, # is a preprocessor in C	✓

Passed all tests! ✓

Q3)

Question **3**

Correct

Marked out of 1.00

Flag question

Identify and correct the error in the code given below.

**Answer:** (penalty regime: 0 %)

Reset answer

```
1 #include <stdio.h>
2
3 int main()
4 {
5     printf("Hello, float data type allocates 4 bytes in memory");
6     return 0;
7 }
```

	Expected	Got	
✓	Hello, float data type allocates 4 bytes in memory	Hello, float data type allocates 4 bytes in memory	✓

Passed all tests! ✓

Q4)

Question 4

Correct

Marked out of  
1.00[Flag question](#)

Identify and correct the error in the code given below.

**Answer:** (penalty regime: 0 %)

Reset answer

```

1 #include <stdio.h>
2 int main()
3 {
4     printf("Hello, I am learning C Language!");
5     return 0;
6 }

```

	Expected	Got	
✓	Hello, I am learning C Language!	Hello, I am learning C Language!	✓

Passed all tests! ✓

Question 5

Correct

Marked out of  
1.00[Flag question](#)Click on **Check** without correcting the code.

This results in many errors because the main function is not defined correctly.

Now, correct the spelling of the main function and submit the program once again.

**Answer:** (penalty regime: 0 %)

Reset answer

```

1 #include <stdio.h>
2
3 int main()
4 {
5     printf("Correct Me!");
6     return 0;
7 }

```

	Expected	Got	
✓	Correct Me!	Correct Me!	✓

Passed all tests! ✓

## int Data Type

ROLL NO: 241801294

Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
Completed	Saturday, 26 October 2024, 9:28 AM
Duration	58 days 8 hours

Question 1

Correct

Marked out of 1.00

Flag question

In the program given below, we shall learn how to assign values to int data type from binary, octal, hex and character literals.

Read the code given below and retype in the space provided.

```
#include <stdio.h>

int main()
{
    int binaryThree = 0b11;
    printf("binaryThree value = %d\n", binaryThree);
    int octalEight = 010;
    printf("octalEight value = %d\n", octalEight);
    int hexTen = 0xA;
    printf("hexTen value = %d\n", hexTen);
    int asciiValueOfOne = '1';
    printf("asciiValueOfOne value = %d\n", asciiValueOfOne);
    int asciiValueOfA = 'A';
    printf("asciiValueOfA value = %d\n", asciiValueOfA);
    return 0;
}
```

}

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int binaryThree = 0b11;
5     printf("binaryThree value = %d\n",binaryThree);
6     int octalEight = 010;
7     printf("octalEight value = %d\n",octalEight);
8     int hexTen = 0xA;
9     printf("hexTen value = %d\n",hexTen);
10    int asciiValueOfOne = '1';
11    printf("asciiValueOfOne value = %d\n",asciiValueOfOne);
12    int asciiValueOfA = 'A';
13    printf("asciiValueOfA value = %d\n",asciiValueOfA);
14    return 0;
15 }
```

	Expected	Got	
✓	binaryThree value = 3 octalEight value = 8 hexTen value = 10 asciiValueOfOne value = 49 asciiValueOfA value = 65	binaryThree value = 3 octalEight value = 8 hexTen value = 10 asciiValueOfOne value = 49 asciiValueOfA value = 65	✓

Passed all tests! ✓

Question **2**

Correct

Marked out of 1.00

Flag question

In the program given below, fill in the missing code to add two integer numbers.

Answer: (penalty regime: 0 %)

Reset answer

1

#include <stdio.h>

2

3

int main()

4

{

5

int num1 = 15, num2 = 25;

6

printf("Given integers are num1 = %d, num2 = %d\n", num1, num2);

7

//Write the code to add num1 and num2 and place the result in the variable sum

8

printf("Sum of 2 given numbers = %d\n", num1+num2);

9

return 0;

10

}

	Expected	Got	
✓	Given integers are num1 = 15, num2 = 25 Sum of 2 given numbers = 40	Given integers are num1 = 15, num2 = 25 Sum of 2 given numbers = 40	✓

Passed all tests! ✓

Q3)

Question **3**

Correct

Marked out of 1.00

Flag question

To print unsigned values on the console, use %u format character instead of %d in the **printf()** function.

Whenever an attempt is made to assign a negative number to an **unsigned int** ( For eg: unsigned int num = -1;) the compiler does not flag it as an **error**. Instead, it will automatically convert the negative number to a positive number as shown below:

unsigned int num = -1;

The value stored in num = unsigned int maximum\_value + 1 - num;

The final value in num = 4294967295 (in a 32-bit processing system)

In the program given below, fill in the missing **format characters** to print **signed** and **unsigned** values.

Answer: (penalty regime: 0 %)

Reset answer

1

#include <stdio.h>

2

3

int main()

4

{

5

signed int number1 = -20, number2 = 20;

6

unsigned int number3 = -1, number4 = 1;

7

printf("Given signed values are %d and %u\n", number1, number2); // Fill the correct format character

8

printf("Given unsigned values are %u and %u\n", number3, number4); // Fill the correct format character

9

return 0;

10

}

	Expected	Got	
✓	Given signed values are -20 and 20 Given unsigned values are 4294967295 and 1	Given signed values are -20 and 20 Given unsigned values are 4294967295 and 1	✓

Passed all tests! ✓

Q4)

Question 4

Correct

Marked out of 1.00

Flag question

Identify the error and correct the code. [Hint: Verify if all variables are declared before they are first used.]

Answer: (penalty regime: 0 %)

Reset answer

```
1 #include <stdio.h>
2
3 int main()
4 {
5     int num, number1 = 20, number2 = 30;
6     num = number1 - number2;
7     printf("The difference of the two given numbers = %d\n", num);
8     return 0;
9 }
10
```

	Expected	Got	
✓	The difference of the two given numbers = -10	The difference of the two given numbers = -10	✓

Passed all tests! ✓

## float Data Type

ROLL NO: 241801294

NAME: THARUN N

Q1)

Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
Completed	Saturday, 26 October 2024, 9:59 AM
Duration	58 days 7 hours

Question 1

Correct

Marked out of 1.00

Flag question

Identify and correct the errors in the code given below:

Expected Output:

Given float values are num1 = 5.340000, num2 = 125.789001

The result after dividing in float format = 23.555992

The result after dividing in exponential format = 2.355599e+01

Answer: (penalty regime: 0 %)

Reset answer

```
1 #include <stdio.h>
2
3 int main()
4 {
5     float num1 = 5.340000, num2 = 125.789001f, result;
6     printf("Given float values are num1 = %.6f, num2 = %.6f\n", num1, num2);
7     result = num2 / num1;
8     printf("The result after dividing in float format = %.6f\n", result);
9     printf("The result after dividing in exponential format = %e\n", result);
10    return 0;
11 }
```

	Expected	Got
✓	Given float values are num1 = 5.340000, num2 = 125.789001 The result after dividing in float format = 23.555992 The result after dividing in exponential format = 2.355599e+01	Given float values are num1 = 5.340000, num2 = The result after dividing in float format = 23. The result after dividing in exponential format

◀ ▶

Passed all tests! ✓

Q2)

Question 2

Correct

Marked out of  
1.00

Flag question

Identify and correct the errors in the code given below:

Answer: (penalty regime: 0 %)

Reset answer

```

1 #include <stdio.h>
2
3 int main()
4 {
5     float num1 = 5.345f, num2 = 12.4, result;
6     printf("Given float values are num1 = %f, num2 = %f\n", num1, num2);
7     result = num1 / num2;
8     printf("Result of division = %f\n", result);
9     return 0;
10 }
```

	Expected	Got
✓	Given float values are num1 = 5.345000, num2 = 12.400000 Result of division = 0.431048	Given float values are num1 = 5.345000, num2 = 12.4 Result of division = 0.431048

◀ ▶

Passed all tests! ✓

## Relational and Equality Operators-Optional

ROLL NO: 241801294

NAME: THARUN N

Q1)

Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
Completed	Thursday, 31 October 2024, 5:14 PM
Duration	53 days

Question 1

Correct

Marked out of 1.00

Flag question

**Relational and equality operators** are used to **test** or **compare** two numeric values or numeric expressions.

In **C**, **Relational and equality operators** when applied on the operands, produce an **integer** value which is either 0 or 1 and these are often referred to as logical values. The value 0 represents false and the value 1 represents true.

In **C**, there are **four** relational and **two** equality operators as given below:

**Operator Description**

- > Checks for greater-than condition
- >= Checks for greater-than-or-equals condition
- < Checks for less-than condition
- <= Checks for less-than-or-equals condition.
- == Checks if two values are equal
- != Checks if two values are unequal

The format for usage of **relational** and **equality operators** is as follows:  
**operand1operatoroperand2**

According to the **coding** conventions in **C**, a single space should be provided to the left and to the right of the operator.

The table given below demonstrates the use of various **relational and equality operators** using variables int num1 = 7;, float num2 = 5.5;, char ch = 'w':

Expression	Interpretation Result Value	
(num1 > 5)	true	1
((num1 + num2) <= 10)	false	0

Expression	Interpretation Result Value	
(num1 > 5)	true	1
((num1 + num2) <= 10)	false	0
(ch == 119)	true	1
(ch != 'p')	true	1
(ch >= 10 * (num1 + num2))	false	0

Read the code given below and retype in the space provided.

#include <stdio.h>

```
int main()
{
    int num1 = 7;
    float num2 = 5.5;
    char ch = 'w';
    printf("Result1 = %d\n", (num1 > 5));
    printf("Result2 = %d\n", ((num1 + num2) <= 10));
    printf("Result3 = %d\n", (ch == 119));
    printf("Result4 = %d\n", (ch != 'p'));
    printf("Result5 = %d", (ch >= 10 * (num1 + num2)));
    return 0;
}
```

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int num1 = 7;
5     float num2 = 5.5;
6     char ch = 'w';
7     printf("Result1 = %d\n", (num1 > 5));
8     printf("Result2 = %d\n", ((num1 + num2) <=10));
9     printf("Result3 = %d\n", (ch == 119));
10    printf("Result4 = %d\n", (ch != 'p'));
11    printf("Result5 = %d", (ch >=10* (num1 + num2)));
12    return 0;
13 }
```

	Expected	Got	
✓	Result1 = 1	Result1 = 1	✓
	Result2 = 0	Result2 = 0	
	Result3 = 1	Result3 = 1	
	Result4 = 1	Result4 = 1	
	Result5 = 0	Result5 = 0	

Passed all tests! ✓

Logical



# Operators-Optional

ROLL NO: 241801294

NAME: THARUN N

Q1)

Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
Completed	Thursday, 31 October 2024, 5:23 PM
Duration	53 days

Question **1**

Correct

Marked out of 1.00

Flag question

Logical operators are used to perform logical operations on the given expressions.

An expression containing a logical operator returns either 0 (or) 1 depending on the evaluation of the expression to either false or true respectively.

**Note: In C, false is represented as 0 (zero) and all non-zero values can be treated as true.**

Given below are the **three** logical operators in **C**:

Operator	Description	Meaning
&&	logical AND	It returns true when both conditions are true, else, it returns false
	logical OR	It returns true if atleast one of the conditions is true
!	logical NOT	It returns true when the given expression is false and returns false when the given expression is true

**According to the [coding](#) conventions in C, a single space should be provided to the left and to the right of the operator.**

The below table demonstrates the use of various **relational and equality operators** using variables int num1 = 7;; float num2 = 5.5;; char ch = 'w':

Expression	Interpretation	Result Value
(num1 >= 6) && (ch == 'w')	true	1
(num2 < 11) && (num1 > 100)	false	0

Expression	Interpretation	Result Value
(num1 >= 6) && (ch == 'w')	true	1
(num2 < 11) && (num1 > 100)	false	0
(ch != 'p')    ((num1 + num2) <= 10)	true	1
!(num1 > (num2 + 1))	false	0
!(num1 <= 3)	true	1

Read the code given below and retype in the space provided.

```
#include <stdio.h>

int main()
{
    int num1 = 7;
    float num2 = 5.5;
    char ch = 'w';
    printf("Result1 = %d\n", ((num1 >= 6) && (ch == 'w')));
    printf("Result2 = %d\n", ((num2 < 11) && (num1 > 100)));
    printf("Result3 = %d\n", ((ch != 'p') || ((num1 + num2) <= 10)));
    printf("Result4 = %d\n", !(num1 > (num2 + 1)));
    printf("Result5 = %d\n", !(num1 <= 3));
    return 0;
}
```

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int num1 = 7;
5     float num2 = 5.5;
6     char ch = 'w';
7     printf("Result1 = %d\n", ((num1 >=6) && (ch == 'w')));
8     printf("Result2 = %d\n", ((num2 <11) && (num1 >=10)));
9     printf("Result3 = %d\n", ((ch != 'p') || ((num1 + num2) <= 10)));
10    printf("Result4 = %d\n", !(num1 > (num2 + 1)));
11    printf("Result5 = %d\n", !(num1 <= 3));
12    return 0;
13 }
14
```

	Expected	Got	
✓	Result1 = 1	Result1 = 1	✓
	Result2 = 0	Result2 = 0	
	Result3 = 1	Result3 = 1	
	Result4 = 0	Result4 = 0	
	Result5 = 1	Result5 = 1	

Passed all tests! ✓

Unary Operators-Optional

ROLL NO: 241801294

NAME: THARUN N

Q1

Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
Completed	Thursday, 31 October 2024, 5:46 PM
Duration	52 days 23 hours

Question 1

Correct

Marked out of 1.00

Flag question

Read the code given below to understand the working of unary operators. Retype in the space provided.

```
#include <stdio.h>

int main()
{
    int x = 16;
    printf("+x = %d\n", (+x));
    printf("-x = %d\n", (-x));
    printf("x = %d\n", x);
    printf("++x = %d\n", (++x));
    printf("x = %d\n", x);
    printf("x++ = %d\n", (x++));
    printf("x = %d\n", x);
    printf("--x = %d\n", (--x));
    printf("x = %d\n", x);
    printf("x-- = %d\n", (x--));
    printf("x = %d", x);
    return 0;
}
```

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int x = 16;
5
6     printf("+x = %d\n", (+x));
7     printf("-x = %d\n", (-x));
8     printf("x = %d\n", x);
9     printf("++x = %d\n", (++x));
10    printf("x = %d\n", x);
11    printf("x++ = %d\n", (x++));
12    printf("x = %d\n", x);
13    printf("--x = %d\n", (--x));
14    printf("x = %d\n", x);
15    printf("x-- = %d\n", (x--));
16    printf("x = %d", x);
17    return 0;
18 }
```

	Expected	Got	
✓	+x = 16 -x = -16 x = 16 ++x = 17 x = 17 x++ = 17 x = 18 --x = 17 x = 17 x-- = 17 x = 16	+x = 16 -x = -16 x = 16 ++x = 17 x = 17 x++ = 17 x = 18 --x = 17 x = 17 x-- = 17 x = 16	✓

Passed all tests! ✓

Q2)

Question **2**

Correct

Marked out of  
1.00

🚩 Flag question

Read the code given below to understand the working of **increment** and **decrement** operators. Retype in the space provided.

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

```
int main()
{
    int x = 4, y;
    y = x++;
    printf("y = %d x = %d\n", y, x);
    y = ++x;
    printf("y = %d x = %d\n", y, x);
    y = x--;
    printf("y = %d x = %d\n", y, x);
    y = --x;
    printf("y = %d x = %d\n", y, x);
    return 0;
}
```

```

1 #include<stdio.h>
2 int main()
3 {
4     int x = 4, y;
5     y = x++;
6     printf("y = %d x = %d\n", y, x);
7     y = ++x;
8     printf("y = %d x = %d\n", y, x);
9     y = x--;
10    printf("y = %d x = %d\n", y, x);
11    y = --x;
12    printf("y = %d x = %d\n", y, x);
13
14    return 0;
15 }

```

	Expected	Got	
✓	y = 4 x = 5	y = 4 x = 5	✓
	y = 6 x = 6	y = 6 x = 6	
	y = 6 x = 5	y = 6 x = 5	
	y = 4 x = 4	y = 4 x = 4	

Passed all tests! ✓

## Assignment Operator-Optional

ROLL NO: 241801294

NAME: THARUN N

Q1)

Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
Completed	Thursday, 31 October 2024, 6:02 PM
Duration	52 days 23 hours

Question 1

Correct

Marked out of 1.00

Flag question

Read the code given below to understand the usage of the assignment operator. Retype in the space provided.

```
#include <stdio.h>

int main()
{
    int x = 24, y = 39, z = 45;
    z = x + y;
    y = z - y;
    x = z - y;
    printf("x = %d y = %d z = %d", x, y, z);
    return 0;
}
```

Answer: (penalty regime: 0 %)

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int x = 24, y = 39, z =45;
5     z = x + y;
6     y = z - y;
7     x = z - y;
8     printf("x = %d y = %d z = %d", x, y, z);
9     return 0;
10 }
```


	Expected	Got	
✓	x = 39 y = 24 z = 63	x = 39 y = 24 z = 63	✓

Passed all tests! ✓

Q2)

Question 2

Correct

Marked out of  
1.00 Flag question

Read the code given below and retype in the space provided.

```
#include <stdio.h>

int main()
{
    int x = 2, y = 18, z = 12;
    x += y;
    printf("x = %d\n", x);
    y *= 2;
    printf("y = %d\n", y);
    z /= 5;
    printf("z = %d\n", z);
    x %= 7;
    printf("x = %d", x);
    return 0;
}
```

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int x = 2, y = 18, z = 12;
5     x += y;
6     printf("x = %d\n", x);
7     y *=2;
8     printf("y = %d\n", y);
9     z /=5;
10    printf("z = %d\n", z);
11    x %=7;
12    printf("x = %d", x);
13    return 0;
14 }
```

	Expected	Got	
✓	x = 20 y = 36 z = 2 x = 6	x = 20 y = 36 z = 2 x = 6	✓

Passed all tests! ✓

# Ternary Operator-Optional

ROLL NO: 241801294

NAME: THARUN N

Q1)

Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
Completed	Thursday, 31 October 2024, 6:09 PM
Duration	52 days 23 hours

Question 1

Correct

Marked out of 1.00

Flag question

C language provides an operator to evaluate conditions. It is called a **conditional operator** (?) or a **ternary operator**.

**Ternary operator** needs exactly **three** operands to compute the result.

The syntax for using a **ternary operator** is:

**condition?** expression1 : expression2

The condition should always evaluate to 1 (true) or 0 (false). If the condition evaluates to true, then **expression1** is evaluated and its value is returned, otherwise **expression2** is evaluated and its value is returned.

Given below is an example demonstrating the usage of a **conditional operator**:

```
int marks = 75, pass_marks = 50;
(marks > pass_marks) ? printf("Passed C Certification") : printf("Failed C Certification");
```

Since the condition marks > pass\_marks evaluates to true, the **expression1** containing the **printf** statement in the above example prints "Passed C Certification"

Read the code given below and retype in the space provided.

```
#include <stdio.h>

int main()
{
    int marks = 75, pass_marks = 50;
    (marks > pass_marks) ? printf("Passed C exam.") : printf("Failed C exam.");
    return 0;
}
```

Answer: (penalty regime: 0 %)

1	#include<stdio.h>	
2	int main()	
3	{	
4	int marks = 75, pass_marks = 50;	
5	(marks > pass_marks)? printf("Passed C exam.") : printf ("Failed C exam.");	
6	return 0;	
7	}	

	Expected	Got	
✓	Passed C exam.	Passed C exam.	✓

Passed all tests! ✓



Q2)

Question **2**

Correct

Marked out of 1.00

Flag question

In the program given below, fill in the missing code to find the **largest** of the two given numbers using **ternary operator**.

**Answer:** (penalty regime: 0 %)

Reset answer

```
1 #include <stdio.h>
2
3 int main()
4 {
5     int num1 = 20, num2 = 25, large;
6     large = (num1 > num2) ? num1 : num2; // Write the correct code
7     printf("Largest number = %d", large);
8     return 0;
9 }
```

	Expected	Got	
✓	Largest number = 25	Largest number = 25	✓

Passed all tests! ✓

Cricket Stadium

ROLL NO: 241801294

NAME: THARUN N

Q1)

Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
Completed	Thursday, 31 October 2024, 6:12 PM
Duration	52 days 23 hours

Question **1**

Correct

Marked out of 1.00

Flag question

There was a large ground in center of the city which is rectangular in shape. The Corporation decides to build a Cricket stadium in the area for school and college students, But the area was used as a car parking zone. In order to protect the land from using as an unauthorized parking zone, the corporation wanted to protect the stadium by building a fence. In order to help the workers to build a fence, they planned to place a thick rope around the ground. They wanted to buy only the exact length of the rope that is needed. They also wanted to cover the entire ground with a carpet during rainy season. They wanted to buy only the exact quantity of carpet that is needed. They requested your help. Can you please help them by writing a program to find the exact length of the rope and the exact quantity of carpet that is required?

Input format:

Input consists of 2 integers. The first integer corresponds to the length of the ground and the second integer corresponds to the breadth of the ground.

Output Format:

Output Consists of two integers. The first integer corresponds to the length. The second integer corresponds to the quantity of carpet required.

Sample Input:

50  
20

Sample Output:

140  
1000

For example:

Input	Result
50	140
20	1000

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int s1, s2;
5     scanf("%d", &s1);
6     scanf("%d", &s2);
7     printf("%d\n%d", ((s1*2) + (s2*2)) , (s1*s2));
8
9 }
```

	Input	Expected	Got	
✓	50	140	140	✓
	20	1000	1000	

Passed all tests! ✓

Sports Day Celebration

ROLL NO: 241801294

NAME: THARUN N

Q1)

Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
Completed	Thursday, 31 October 2024, 9:30 PM
Duration	52 days 20 hours

Question 1

Correct

Marked out of 1.00

Flag question

Training for sports day has begun and the physical education teacher has decided to conduct some team games. The teacher wants to split the students in higher secondary into equal sized teams. In some cases, there may be some students who are left out from the teams and he wanted to use the left out students to assist him in conducting the team games. For instance, if there are 50 students in a class and if the class has to be divided into 7 equal sized teams, 7 students will be there in each team and 1 student will be left out. That 1 student will assist the PET. With this idea in mind, the PET wants your help to automate this team splitting task. Can you please help him out?

INPUT FORMAT:

Input consists of 2 integers. The first integer corresponds to the number of students in the class and the second integer corresponds to the number of teams.

OUTPUT FORMAT:

The output consists of two integers. The first integer corresponds to the number of students in each team and the second integer corresponds to the students who are left out.

SAMPLE INPUT:

60  
8

SAMPLE OUTPUT:

7

For example:

Input	Result
60	7
8	4

Answer: (penalty regime: 0 %)

1	#include<stdio.h>	
2	int main()	
3	{	
4	int p, t;	
5	scanf("%d", &p);	
6	scanf("%d", &t);	
7	printf("%d\n%d", (p/t), (p%t));	
8	}	

	Input	Expected	Got	
✓	60	7	7	✓
	8	4	4	

Passed all tests! ✓

# The Newspaper Agency

ROLL NO: 241801294

NAME: THARUN N

Q1)

Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
Completed	Thursday, 31 October 2024, 9:33 PM
Duration	52 days 19 hours

Question 1

Correct

Marked out of 1.00

Flag question

Each Sunday, a newspaper agency sells  $w$  copies of a special edition newspaper for Rs. $x$  per copy. The cost to the agency of each newspaper is Rs. $y$ . The agency pays a fixed cost for storage, delivery and so on of Rs.100 per Sunday. The newspaper agency wants to calculate the profit which it obtains only on Sundays. Can you please help them out by writing a program to compute the profit if  $w$ ,  $x$ , and  $y$  are given?

INPUT FORMAT:

Input consists of 3 integers:  $w$ ,  $x$ , and  $y$ .  $w$  is the number of copies sold,  $x$  is the cost per copy and  $y$  is the cost the agency spends per copy.

OUTPUT FORMAT:

The output consists of a single integer which corresponds to the profit obtained by the newspaper agency.

SAMPLE INPUT:

1000

2

1

SAMPLE OUTPUT:

900

For example:

Input	Result
1000	900
2	
1	

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int w, x, y;
5     scanf("%d", &w);
6     scanf("%d", &x);
7     scanf("%d", &y);
8
9     int t = (w * (x - y)) - 100;
10    printf("%d", t);
11 }
```

	Input	Expected	Got	
✓	1000	900	900	✓
	2			
	1			

Passed all tests! ✓

# The Chronicles of Narnia

ROLL NO: 241801294

NAME: THARUN N

Q1)

Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
Completed	Thursday, 31 October 2024, 9:35 PM
Duration	52 days 19 hours

Question 1

Correct

Marked out of 1.00

Flag question

Four kids Peter, Susan, Edmond and Lucy travel through a wardrobe to the land of Narnia. Narnia is a fantasy world of magic with mythical beasts and talking animals. While exploring the land of narnia Lucy found Mr.Tumnus the two legged stag ,and she followed it, down a narrow path .She and Mr.Tumnus became friends and he offered a cup of coffee to Lucy in his small hut.It was time for Lucy to return to her family and so she bid good bye to Mr.Tumnus and while leaving Mr.Tumnus told that it is quite difficult to find the route back as it was already dark. He told her to see the trees while returning back and said that the first tree with two digits number will help her find the way and the way to go back to her home is the sum of digits of the tree and that numbered way will lead her to the tree next to the wardrobe where she can find the others. Lucy was already confused, so please help her in finding the route to her home....

Input Format:

Input consists of an integer corresponding to the 2-digit number.

Output Format:

Output consists of an integer corresponding to the sum of its digits.

SAMPLE INPUT:

87

SAMPLE OUTPUT:

15

For example:

Input	Result
87	15

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int n;
5     scanf("%d", &n);
6     int p = 0;
7     while (n != 0) {
8         p += (n%10);
9         n = n/10;
10    }
11    printf("%d", p);
12 }
```

	Input	Expected	Got	
✓	87	15	15	✓
✓	54	9	9	✓

Passed all tests! ✓

int Data Type

ROLL NO: 241801294

NAME: THARUN N

Q1)

Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
Completed	Thursday, 31 October 2024, 9:52 PM
Duration	52 days 19 hours

Question 1

Correct

Marked out of 1.00

Flag question

In the program given below, we shall learn how to assign values to int data type from binary, octal, hex and character literals.

Read the code given below and retype in the space provided.

```
#include <stdio.h>

int main()
{
    int binaryThree = 0b11;
    printf("binaryThree value = %d\n", binaryThree);
    int octalEight = 010;
    printf("octalEight value = %d\n", octalEight);
    int hexTen = 0xA;
    printf("hexTen value = %d\n", hexTen);
    int asciiValueOfOne = '1';
    printf("asciiValueOfOne value = %d\n", asciiValueOfOne);
    int asciiValueOfA = 'A';
    printf("asciiValueOfA value = %d\n", asciiValueOfA);
    return 0;
}
```

Answer: (penalty regime: 0 %)

1	#include<stdio.h>	
2	int main()	
3	{	
4	int binaryThree = 0b11;	
5	printf("binaryThree value = %d\n", binaryThree);	
6	int octalEight =010;	
7	printf("octalEight value = %d\n", octalEight);	
8	int hexTen = 0xA;	
9	printf("hexTen value = %d\n", hexTen);	
10	int asciiValueOfOne = '1';	
11	printf("asciiValueOfOne value = %d\n", asciiValueOfOne);	
12	int asciiValueOfA = 'A';	
13	printf("asciiValueOfA value = %d\n", asciiValueOfA);	
14	}	

	Expected	Got	
✓	binaryThree value = 3 octalEight value = 8 hexTen value = 10 asciiValueOfOne value = 49 asciiValueOfA value = 65	binaryThree value = 3 octalEight value = 8 hexTen value = 10 asciiValueOfOne value = 49 asciiValueOfA value = 65	✓

Passed all tests! ✓

Q2)

Question **2**

Correct

Marked out of 1.00

Flag question

In the program given below, fill in the missing code to add two integer numbers.

**Answer:** (penalty regime: 0 %)

Reset answer

```
1 #include <stdio.h>
2
3 int main()
4 {
5     int num1 = 15, num2 = 25, sum;
6     printf("Given integers are num1 = %d, num2 = %d\n", num1, num2);
7     //Write the code to add num1 and num2 and place the result in the variable sum
8     sum = num1 + num2;
9     printf("Sum of 2 given numbers = %d\n", sum);
10    return 0;
11 }
```

	Expected	Got	
✓	Given integers are num1 = 15, num2 = 25 Sum of 2 given numbers = 40	Given integers are num1 = 15, num2 = 25 Sum of 2 given numbers = 40	✓
Passed all tests! ✓			