GE23131-Programming Using C-2024-2025
Week 1 Assessment

Overview Of C

Question 1

The code given below contains instructions to print the text "**I love Apples**" to the console.

The \n in the text "I love Apples**\n**" ensures that the line breaks after printing the text "I love Apples" (which means that nothing else is printed on the same line).

Follow the steps given below to change the text, execute **compile** command and finally **execute** the file :

1. In the code given below, change the text to print "**I love Mangoes**" instead of "**I love Apples**".

Answer: (penalty regime: 0 %)

Reset answer

```c
#include <stdio.h>

int main()
{
    printf("I love Mangoes\n");
    return 0;
}
```

	Expected	Got	
✓	I love Mangoes	I love Mangoes	✓

Passed all tests! ✓

Question 2

Given below is a simple program written in **C** language.

Change the text in the code given below to make the program print "**Hello C**" instead of "**Hello B**".

Answer: (penalty regime: 0 %)

Reset answer

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

	Expected	Got	
✓	Hello C	Hello C	✓

Passed all tests! ✓

Overview Of C , Constants , Variables And Datatypes

Assessment 1

Digits in Tenth Position

The program must accept a positive integer N and print the digit in the tenth position.

Input Format:

The first line denotes the value of N.

Output Format:

The first line contains the value of N.

Boundary Conditions:

10 <= N<9999999

Example Input/Output 1:

Input:

20

Output:

2

Example Input/Output 2:

Input:

37843

Output:

4

Answer: (penalty regime: 0 %)

```c
#include<stdio.h>
int main()
{
    int a,tenp;
    scanf("%d",&a);
    tenp=(a/10)%10;
    printf("%d\n",tenp);

}
```

	Input	Expected	Got	
✓	20	2	2	✓
✓	37843	4	4	✓

Passed all tests! ✓

Calculate The Area

Write a C Program to calculates the area (floating point number with two decimal places) of a Circle given it's radius (integer value). The value of Pi is 3.14.

Sample Test Cases

Test Case 1

Input

7

Output

Area of a circle = 153.86

Test Case 2

Input

50

Output

Area of a circle = 7850.00

Test Case 3

Input

42

Output

Area of a circle = 5538.96

```
1  #include<stdio.h>
2  int main()
3  {
4      int r;
5      float area;
6      scanf("%d",&r);
7      area=3.14*r*r;
8      printf("Area of a circle = %.2f",area);
9  }
```

	Input	Expected	Got	
✓	7	Area of a circle = 153.86	Area of a circle = 153.86	✓
✓	50	Area of a circle = 7850.00	Area of a circle = 7850.00	✓

Passed all tests! ✓

SWAP

Develop a 'C' program to swap two numbers (using three variables).

Input

10 20

Output

Before swapping :

a = 10 b = 20

After swapping :

a = 20 b = 10

```
1  #include <stdio.h>
2  int main()
3  {
4      int a,b,x;
5      scanf("%d %d",&a,&b);
6      printf("Before swapping :\n");
7      printf("a = %d b = %d\n",a,b);
8      x=a;
9      a=b;
10     b=x;
11     printf("After swapping :\n");
12     printf("a = %d b = %d\n",a,b);
13     return 0;
14 }
```

	Input	Expected	Got	
✓	10 20	Before swapping : a = 10 b = 20 After swapping : a = 20 b = 10	Before swapping : a = 10 b = 20 After swapping : a = 20 b = 10	✓

Passed all tests! ✓

ASCII VALUE

Write a program to print the ASCII value of the given character.

Input

A

Output

The ASCII value of the given character A is : 65

```
1  #include<stdio.h>
2  int main()
3  {
4      char a;
5      scanf("%c",&a);
6      printf("The ASCII value of the given character A is : %d",a);
7  }
```

	Input	Expected	Got	
✓	A	The ASCII value of the given character A is : 65	The ASCII value of the given character A is : 65	✓

Passed all tests! ✓