EXTRA LAB CODES

Ques 1- Write a program that prints the size (in bytes) of int, float, char, double, and long long using size of operator.

```c
#include <stdio.h>

int main() {
    printf("Size of int: %lu bytes\n", sizeof(int));
    printf("Size of float: %lu bytes\n", sizeof(float));
    printf("Size of char: %lu bytes\n", sizeof(char));
    printf("Size of double: %lu bytes\n", sizeof(double));
    printf("Size of long: %lu bytes\n", sizeof(long));
    printf("Size of long long: %lu bytes\n", sizeof(long long
        ));

    return 0;
}
```

```
Size of int: 4 bytes
Size of float: 4 bytes
Size of char: 1 bytes
Size of double: 8 bytes
Size of long: 8 bytes
Size of long long: 8 bytes


=== Code Execution Successful ===
```

Ques2- Given two integers divide them and print the result in float (type conversation)

```c
#include <stdio.h>

int main() {
    int num1 = 10;
    int num2 = 3;
    float result;


    result = (float)num1 / num2;
    printf("Result using explicit cast: %.2f\n", result);


    result = num1 * 1.0f / num2;
    printf("Result using float literal: %.2f\n", result);

    return 0;
}
```

```
Result using explicit cast: 3.33
Result using float literal: 3.33


=== Code Execution Successful ===
```

Ques3- Create a program where a global variable and a local variable have same name. Print their values inside and outside the function to show the difference

```c
#include <stdio.h>
int x = 100;
void demonstrateScope() {
    int x = 200;
    printf("Inside function: Local x = %d\n", x);
}
int main() {
    printf("Outside function (before call): Global x = %d\n", x
        );
    demonstrateScope();
    printf("Outside function (after call): Global x = %d\n", x
        );

    return 0;
}
```

```
Outside function (before call): Global x = 100
Inside function: Local x = 200
Outside function (after call): Global x = 100

=== Code Execution Successful ===
```

Ques4- Write a small C snippet with int , if, while , return Ask students. Which words are key words ? Which are identifiers?

```c
#include <stdio.h>

int main() {
    int count = 3;

    if (count > 0) {
        while (count > 0) {
            printf("%d\n", count);
            count--;
        }
    }

    return 0;
}
```

```
3
2
1

=== Code Execution Successful ===
```

Ques5- Write a program that takes a character as input and prints its ASCII value.

```
#include <stdio.h>

int main() {
    char ch;

    printf("Enter a character: ");
    scanf("%c", &ch);

    printf("The ASCII value of '%c' is %d\n", ch, ch);

    return 0;
}
```

```
Enter a character: abc
The ASCII value of 'a' is 97


=== Code Execution Successful ===
```

Ques 6- Write a program that finds the sum of digits of number using while loop.

```
#include <stdio.h>

int main() {
    int num, sum = 0, digit;

    printf("Enter a number: ");
    scanf("%d", &num);

    while (num > 0) {
        digit = num % 10;
        sum = sum + digit;
        num = num / 10;
    }

    printf("Sum of digits = %d\n", sum);

    return 0;
}
```

```
Enter a number: 67
Sum of digits = 13


=== Code Execution Successful ===
```

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Batch 55

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