

*Department of Computer Science
University of BATNA 2
First Practical Work
2023/2024*

Program 1:

This program displays the message “hello world”:

```
#include <stdio.h> // Standard input output library
int main() // Main function
{ // BEGIN
    printf("hello world\n"); // Message
    return 0;
} // END
```

1. Use **CTRL F9** & **CTRL F10**.
2. Use **BUILD** & **RUN**.
3. Provide a conclusion.

Program 2:

1. Determine whether the following code is valid or not:

```
#include <stdio.h>
int main() {
    printf(My first program);
    return 0;
}
```

2. Specify the error if the code is not valid.
3. Explain the role of the compiler.

Program 3:

1. Write a program that displays the message:

Learn how to code.

2. Use "\t" to format it.
3. Use escape sequence "\n" to display:

C is a language
Developed by Dennis Ritchie
In 1972 in the USA.

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Program 4:

This program demonstrates how the character data type works in C:

```
#include <stdio.h>
int main() {
    char car;
    printf("Enter a character:\n");
    scanf("%c", &car);
    printf("The character entered by the user is: %c", car);
    return 0;
}
```

1. Write a program to input and display a number from the user.
 - a. Integer number.
 - b. Real number.

Program 5:

Identify errors in the following code:

```
// #include <stdio.h>
int main() {
    int a;
    printf("Enter a:\n");
    scanf("%d", A);
    printf("\n");
    printf("a=%d\n", a);
    printf("++a=%d\n", ++a);
    printf("a=%d\n", a);
    printf("a++=%d\n", a++);
    printf("a=%d\n", a);
    printf("a--=%d\n", a--);
    printf("a=%d\n", a);
    printf("--a=%d\n", --a);
    printf("a=%d\n", a);
    return 0;
}
```

Program 6:

Write a program to calculate and print the perimeter and area of a rectangle.
Take the length (l) and width (L) as input from the user.