



C Programming Examples

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Problem Description

Write a C program that uses constants, integers, doubles, floats, characters, and 'scanf'/'printf' to collect and display a short bio and academic summary. The output must include at least 3 lines and use field specifiers and escape sequences for formatting.

Code

```
// Simple program using constants, integers, doubles, floats,
// characters, printf and scanf.
// Outputs 3 lines containing text and numbers (short bio and
// academic summary).

#include <stdio.h>

int main() {
    const int currentYear = 2025;
    char initial;
    int age, birthDay, birthMonth, birthYear, courses;
    double hours;
    float gpa;

    printf("Enter your name initial:\n");
    scanf("%c", &initial);

    printf("Enter your age:\n");
    scanf("%d", &age);

    printf("Enter your birth date (day month year):\n");
    scanf("%d %d %d", &birthDay, &birthMonth, &birthYear);

    // Long Float
    printf("Enter number of courses, hours studied, and GPA:\n");
    scanf("%d %lf %f", &courses, &hours, &gpa);
```

```
printf("Hello, my name starts with %c.\n", initial);
printf("I am %d years old, born on %02d/%02d/%d.\n", age,
      birthDay, birthMonth, birthYear);
printf("It is currently in the year %d.\n", currentYear);
printf("I'm taking %d courses, studied %.1f hours, my GPA is %.2
      f out of 5.\n", courses, hours, gpa);

return 0;
}
```

Sample Output

Enter your name initial:

I

Enter your age:

28

Enter your birth date (day month year):

3 9 1997

Enter number of courses, hours studied, and GPA:

5 123.5 4.25

Hello, my name starts with I.

I am 28 years old, born on 03/09/1997.

It is currently in the year 2025.

I'm taking 5 courses, studied 123.5 hours, my GPA is 4.25 out of 5.