

C LIBRARY FUNCTION - DIV

http://www.tutorialspoint.com/c_standard_library/c_function_div.htm

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Description

The C library function **div_t** **div**(*number*, *intdenom*) divides **number** *numerator* by **denom** *denominator*.

Declaration

Following is the declaration for div function.

```
div_t div(int number, int denom)
```

Parameters

- **number** -- This is the numerator.
- **denom** -- This is the denominator.

Return Value

This function returns the value in a structure defined in <stdlib>, which has two members. For `div_t: int quot; int rem;`

Example

The following example shows the usage of div function.

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

int main()
{
    div_t output;

    output = div(27, 4);
    printf("Quotient part of (27/ 4) = %d\n", output.quot);
    printf("Remainder part of (27/4) = %d\n", output.rem);

    output = div(27, 3);
    printf("Quotient part of (27/ 3) = %d\n", output.quot);
    printf("Remainder part of (27/3) = %d\n", output.rem);

    return(0);
}
```

Let us compile and run the above program that will produce the following result:

```
Quotient part of (27/ 4) = 6
Remainder part of (27/4) = 3
Quotient part of (27/ 3) = 9
Remainder part of (27/3) = 0
```

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