

In the C programming language, the `putchar` function is used to output a character to the standard output (usually the console). The expression `3 + '0'` involves both numeric addition and character representation.

In C, characters are represented by their ASCII values. The ASCII value for the character '0' is 48. So, `3 + '0'` is equivalent to `3 + 48`, which results in 51.

When you pass the result 51 to the `putchar` function, it interprets it as a character and prints the character with the ASCII value of 51. In the ASCII table, the character with the value 51 is '3'. Therefore, `putchar(3 + '0')` will print the character '3'.

Here's a simple C program that demonstrates this:

```
#include <stdio.h>

int main() {
    putchar(3 + '0');
    return 0;
}
```

When you run this program, it should output the character '3' to the console.

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