

```
#include <unistd.h>
```

```
void ft_putchar(char c)
{
    write(1, &c, 1);
}
```

```
void ft_putstr(char *s)
{
    while (*s)
        ft_putchar(*s++);
}
```

```
void ft_printhex(int n)
{
    int c;

    if (n >= 16)
        ft_printhex(n / 16);
    c = n % 16 + (n % 16 < 10 ? '0' : 'a' - 10);
    ft_putchar(c);
}
```

```
void ft_printchars(unsigned char c)
{
    ft_putchar((c > 31 && c < 127) ? c : '.');
}
```

```
void print_memory(const void *addr, size_t size)
{
    unsigned char *t = (unsigned char *)addr;
    size_t i = 0;
    int col;
    size_t tmp = 0;

    while (i < size)
    {
        col = -1;
        tmp = i;
        while (++col < 16)
        {
            if (i < size)
            {
                if (t[i] < 16)
                    ft_putchar('0');
                ft_printhex(t[i]);
            }
            else
                ft_putstr(" ");
            ft_putchar((i++ & 1) << 6);
        }
        col = -1;
        i = tmp;
        while (++col < 16 && i < size)
            ft_printchars(t[i++]);
        ft_putchar('\n');
    }
}
```