

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

```
void ft_putchar(char c)
```

```
{  
    write (1, &c, 1);  
}
```

```
void ft_putascii(unsigned char c)
```

```
{  
    if (c > 31 && c < 127)  
        ft_putchar(c);  
    else  
        ft_putchar('.');  
}
```

```
void ft_puthex(unsigned char c)
```

```
{  
    char tab[16] = "0123456789abcdef";  
  
    ft_putchar(tab[c / 16]);  
    ft_putchar(tab[c % 16]);  
}
```

```
void print_line(unsigned char *str, size_t start, size_t max)
```

```
{  
    size_t i;  
    i = start;  
    while (i < start + 16 && i < max)  
    {  
        ft_puthex(str[i]);  
        if (i % 2)  
            ft_putchar(' ');  
        i++;  
    }  
    while (i < start + 16)  
    {  
        ft_putchar(' ');  
        ft_putchar(' ');  
        if (i % 2)  
            ft_putchar(' ');  
        i++;  
    }  
    i = start;  
    while(i < start + 16 && i < max)  
    {  
        ft_putascii(str[i]);  
        i++;  
    }  
    ft_putchar('\n');  
}
```

```
void print_memory(const void *addr, size_t size)
```

```
{  
    unsigned char *str;  
    size_t c;  
  
    str = (unsigned char *)addr;  
    c = 0;  
  
    while (c < size)  
    {  
        print_line(str, c, size);  
        c += 16;  
    }  
}
```