



COMP1511

Tutorial 8

malloc | linked lists



malloc

Allocates memory that persists outside local scope i.e. won't be deleted when a function ends.

```
void *malloc(size_t size)
```

Takes the amount of memory to be allocated and returns the address of the allocated memory.

Visualising Linked Lists



```
struct node {  
    int data;  
    struct node *next;  
};
```

struct node

int data
struct node
*next

```
int data = 1  
struct node  
*next = 0xFF40
```

0xFF00

```
int data = 3  
struct node  
*next = 0xFFA0
```

0xFF40

```
int data = 5  
struct node  
*next = NULL
```

0xFFA0

NULL