

## OTHER SUPPLEMENTAL NOTES

### Intro to Dynamic Memory Allocation & Linked Lists in C

```
(int *) malloc(sizeof(int))
```

type cast to  
change to  
pointer of  
desired type

function: allocates  
the memory (and  
returns address of  
memory allocated  
as pointer to type  
void)

sizeof(): function,  
in this case  
allocates enough  
bytes to store  
an integer

this will allocate enough  
space for an integer and  
casts the address of the  
location to an int pointer

```
intptr = (int *) malloc(sizeof(int));
```



```
*intptr = 30;
```



```
// Example 1
```

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

```
int main()
```

```
{
```

```
① [ char letter = 'L',
    *chptr;
    chptr = &letter;
    printf("letter is %c\n", letter);
    printf("*chptr is %c\n", *chptr);
```

```
② [ chptr = (char *) malloc(sizeof(char));
    *chptr = 'G';
    printf("letter is %c\n", letter);
    printf("*chptr is %c\n", *chptr);
```

```
    free(chptr);
    return 0;
}
```

output:

letter is L

\*chptr is L

letter is L

\*chptr is G

