lesson 44 Define(Macro)

We know that we have a code we want to use more than once, we can use **functions**, then we call them whenever we need them by writing the name of the function.

But if I have one line that I'm going to use multiple times no need to put in a function. We can use the key word **define**.

For example pi = 22/7, we used to do that **const int pi=22/7,** but using **define**, I can tell the computer that pi equals 22/7 :

#include <stdio.h>

#define pi 3.14

int main() {

printf("%f", pi);

}

output :

3.140000

—---------------

#include <stdio.h>

#define pi 3.14

int main() {

pi = 3.14;

```c
//That's wrong because pi is not a variable
printf("%f", pi);
}
output :
3.140000
```

What can we also do with **define** ?

We can define **statements** :

```c
#include <stdio.h>
#define hi printf("Hello Gammal Tech\n");
int main() {
hi
//We don't put the ; because we putted it above in the define
}
```

output :

Hello Gammal Tech

We can use the **define** with the **for** :

```c
#include <stdio.h>
#define fo(i,n) for(i=0;i<n;i++)
#define hi printf("Hello Gammal Tech\n");
```

```c
int main() {
int i;
fo(i,5)
hi
}
```

output :

```
Hello Gammal Tech
Hello Gammal Tech
Hello Gammal Tech
Hello Gammal Tech
Hello Gammal Tech
```

We can also change the **main** with **define** :

```c
#include <stdio.h>
#define fo(i,n) for(i=0;i<n;i++)
#define hi printf("Hello Gammal Tech\n");
#define r return 0;
#define tech main
int tech() {
```

```
int i;
fo(i, 2)
hi
r
}
```

output :

Hello Gammal Tech

Hello Gammal Tech