

Procedure, example program of procedure

```
.code
Main proc
```

What is Procedure?

It is just a block of code that can be called anywhere in the program with name

Why do we need it?

- Reusability
- Reduce complexity

```
Main endp
End main
```

How to use Procedure?

```
enterkey proc
```

```
Mov dx, 10
Mov ah, 2
Int 21h
```

```
Mov dx, 13
Mov ah, 2
Int 21h
```

```
Ret
enterkey endp
```

```
enterkey proc
```

```
Mov dx, 10
Mov ah, 2
Int 21h
```

```
Mov dx, 13
Mov ah, 2
Int 21h
```

```
ret
enterkey endp
```

For Enter

Call enterkey
Hello
How are you
Good to see you

```
Name proc
```

```
ret
Name endp
```

Call Name


```
.model small
.stack 100h
.data
str1 db 'hello$'
str2 db 'how are you$'
str3 db 'good to see you$'
.code
main proc
mov ax, @data
mov ds, ax
mov dx, offset str1
mov ah, 9
int 21h
call enterkey
mov dx, offset str2
mov ah, 9
int 21h
call enterkey
mov dx, offset str3
mov ah, 9
int 21h_
```



```
enterkey proc  
mov dx, 10  
mov ah, 2  
int 21h  
mov dx, 13  
mov ah, 2  
int 21h  
ret  
enterkey endp
```

```
end main
```



```

print macro p1
Mov dx, offset p1
Mov ah, 9
Int 21h
endm

```

What is macro?

It is just a block of code that can be used with input parameters anywhere in the program with name

It is a perfect function.

Why do we need it?

- Reusability with input parameters
- Reduce complexity

How to use macro?

Name **macro** p1, p2, ...

endm

Name p1, p2, ...

What is Difference b/w Procedure and Macro

Proc	Macro
No input parameters	Input parameters
Ret is used	No 'ret' is used
Slow, goes and run code	Fast, replace with code

```

.model small
.stack 100h
.data

```

```

Str1 db 'hello$'
Str2 db 'it is a test program$'

```

```

.code
Main proc
Mov ax, @data
Mov ds, ax

```

```

print str1
print str2

```

```

Mov ah, 4ch
Int 21h
Main endp
End main

```

For Print

```

Mov dx, offset p1
Mov ah, 9
Int 21h

```

endm

print macro p1

print str1

print str2

print proc

```

Ret
print endp

```