

`#include<stdio.h>`
`int maximum(int num1, int num2);`

1. Write the prototype for maximum.

`int main(void)`
`{`
`int n1, n2, max;`
`printf("Enter two integers: ");`
`scanf("%d %d", &n1, &n2);`
`max = maximum(n1, n2);`
`printf("Max = %d\n", max);`
`return 0;`
`}`

2. Write the arguments needed send data to maximum.

`int maximum(int num1, int num2)`
`{`
`int theMax;`

`if (num1 > num2)`
`{`
`theMax = num1;`
`}`
`else`
`{`
`theMax = num2;`
`}`
`return theMax;`
`}`

3. What is the type of theMax?

definition of function

3/5

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

```
int maximum(int num1, int num2);
```

```
void displayMax(int n1, int n2, int max);
```

```
int main()
```

```
{
```

```
    int num1=5, num2=8, max;
```

```
    max = maximum(num1,num2);
```

```
    displayMax(num1, num2, max);
```

```
    displayMax(num1, num2, maximum(num1,num2));
```

```
    return 0;
```

```
}
```

```
int maximum(int num1, int num2)
```

```
{
```

```
    int maxNum;
```

```
    if (num1 > num2)
```

```
    {
```

```
        maxNum = num1;
```

```
    }
```

```
    else
```

```
    {
```

```
        maxNum = num2;
```

```
    }
```

```
    return maxNum;
```

```
}
```

```
void displayMax(int n1, int n2, int max)
```

```
{
```

```
    printf("The maximum of %d and %d is %d.\n",n1,n2,max);
```

```
}
```

```
«---jGRASP exec: H:\My Documents\comp 1200\Hundley\Examples\a.exe
```

```
The maximum of 5 and 8 is 8.
```

```
The maximum of 5 and 8 is 8.
```

```
----jGRASP: operation complete.
```

assigning value

use funct value

NO return

3/5

```
/* call-by-value vs call_by_ref */
#include <stdio.h>
```

P

```
float cal_tax      (float  price, float tax_rate);
void tax_included(float *price, float tax_rate);

int main()
{
    float price=2.99, tax_rate=0.06, tax;
    tax = cal_tax(price, tax_rate);
    price = price + tax;
    printf("The price including tax = $%4.2f\n", price);

    price = 2.99;
    tax_included(&price, tax_rate);
    printf("The price including tax = $%4.2f\n", price);
    return 0;
}
```

M

F

```
float cal_tax(float  price, float tax_rate)
{
    return (price * tax_rate);
}
```

call-by-val

F

```
void tax_included(float *price, float tax_rate)
{
    *price = *price * (1.0 + tax_rate);
}
```

ptr type var

call-by-ref

```
----jGRASP exec: H:\My Documents\comp 1200\Hundley\Examples\a.exe
```

```
The price including tax = $3.17
```

```
The price including tax = $3.17
```

```
----jGRASP: operation complete.
```