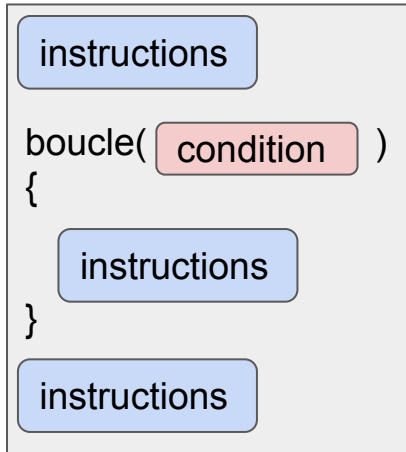


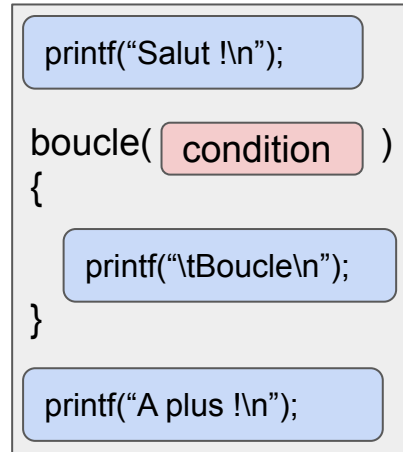
# Programmation C

## 8 - Les boucles

# Les boucles



*Structure*

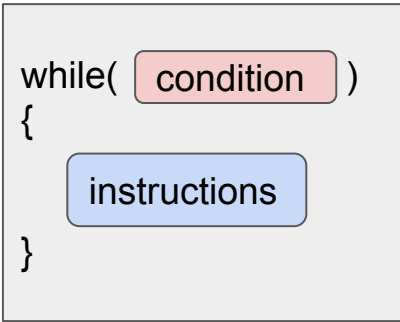


*Exemple*

Salut !  
Boucle  
Boucle  
Boucle  
Boucle  
A plus !

boucles en C: while, do while et for

## La boucle while



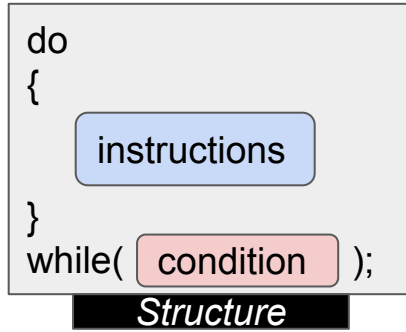
*Structure*

```
int var = 0;
while( var < 5 )
{
    printf("%d\n", var);
    var ++;
}
```

0  
1  
2  
3  
4

*Exemple*

## La boucle do while



```
int var = 6;
do
{
    printf("%d\n", var);
    var ++;
}
while( var < 5 );
```

6

Example

## La boucle for

```
for( init ; condition ; modification )  
{  
    instructions  
}
```

*Structure*

```
for(int var=0; var<5; var++)  
{  
    printf("%d\n", var);  
}
```

*Exemple*

0  
1  
2  
3  
4

```
int var = 0;  
  
while( var < 5 )  
{  
    printf("%d\n", var);  
    var ++;  
}
```

*Équivalent*

0  
1  
2  
3  
4

## Break et Continue

**break:** sortir de la boucle courante

```
printf("debut \n");  
  
for(int var=0; var<5; var++)  
{  
    if(var == 2)  
    {  
        break;  
    }  
  
    printf("%d\n", var);  
}  
  
printf("fin \n");
```

*break*

```
debut  
0  
1  
fin
```

**continue:** sauter a la fin de la boucle

```
printf("debut \n");  
  
for(int var=0; var<5; var++)  
{  
    if(var == 2)  
    {  
        continue;  
    }  
  
    printf("%d\n", var);  
}  
  
printf("fin \n");
```

*continue*

```
debut  
0  
1  
3  
4  
fin
```