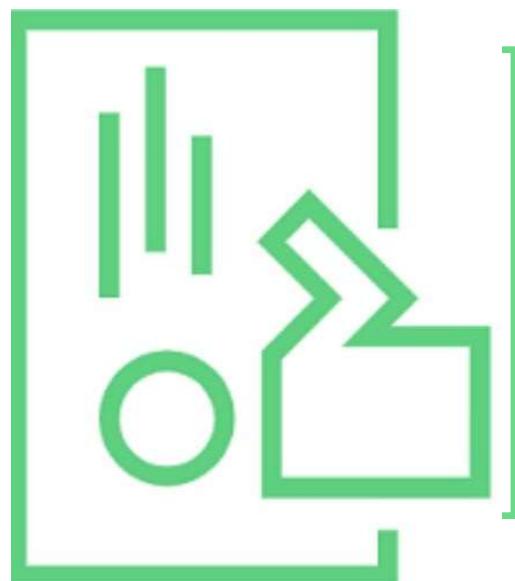# C/C++ Loops

Stefan Holmberg, Systementor AB

Loopar - for

- for (init; condition; increment) {
- statement(s);
- }

```c
for(int i=1; i<=6; i++){
    /* This statement would be executed
     * repeatedly until the condition
     * i<=6 returns false.
     */
    printf("Value is %d n\",i);
}

// infinite loop
for ( ; ; ) {
    // statement(s)
}

int arr[]={21,9,56,99, 202};
/* We have set the value of variable i
 * to 0 as the array index starts with 0
 * which means the first element of array
 * starts with zero index.
 */
for(int i=0; i<5; i++){
    printf("Value is %d\n",arr[i]);
}
```

Loopar - while

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

Loopar – do while

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

}
```

Do while = 1 – n gånger
While = 0 – n gånger

Loopar – break and continue

```c
while(true)
{
    char wannaContinue[255];
    printf("Vill du fortsätta?");
    scanf(" %s", wannaContinue);
    if (wannaContinue[0] == "j")
        break;

}
```