ALGOL 60 Tutorial

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Seminar Turing Award Winners and Their Contributions
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Extent of Tutorial

- 35 pages
- Bottom up
- From Basic to Advanced
- Self-Reflective
- Example based

Call-by-name

Example

```
procedure callByName(arr);
array arr;
begin
    integer i;
    i := 0;
    print(arr[i]);
    i := 5;
    print(arr[i]);
    arr[i] := 10
end;
```

Example

```
integer procedure callByValue(i);
value i;
integer i;
begin
    callByValue := i + 5
end;
```

Scope-rules

Example

```
integer i;
boolean b;
b := false;
i := 0;
begin
    real r; integer i;
    i := 100;
    r := 5.0;
    begin
        integer b;
        b := 10;
        i := 10
    end;
end;
```

While-loops

Example

```
integer i, max;
i := 0;
max := 10;
WHILE:
    if i >= max then go to EXIT;
    i := i + 1;
    go to WHILE;
EXIT:
```

Merge-sort

Example

External code