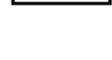
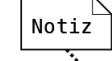
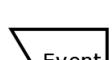


Activity Diagrams

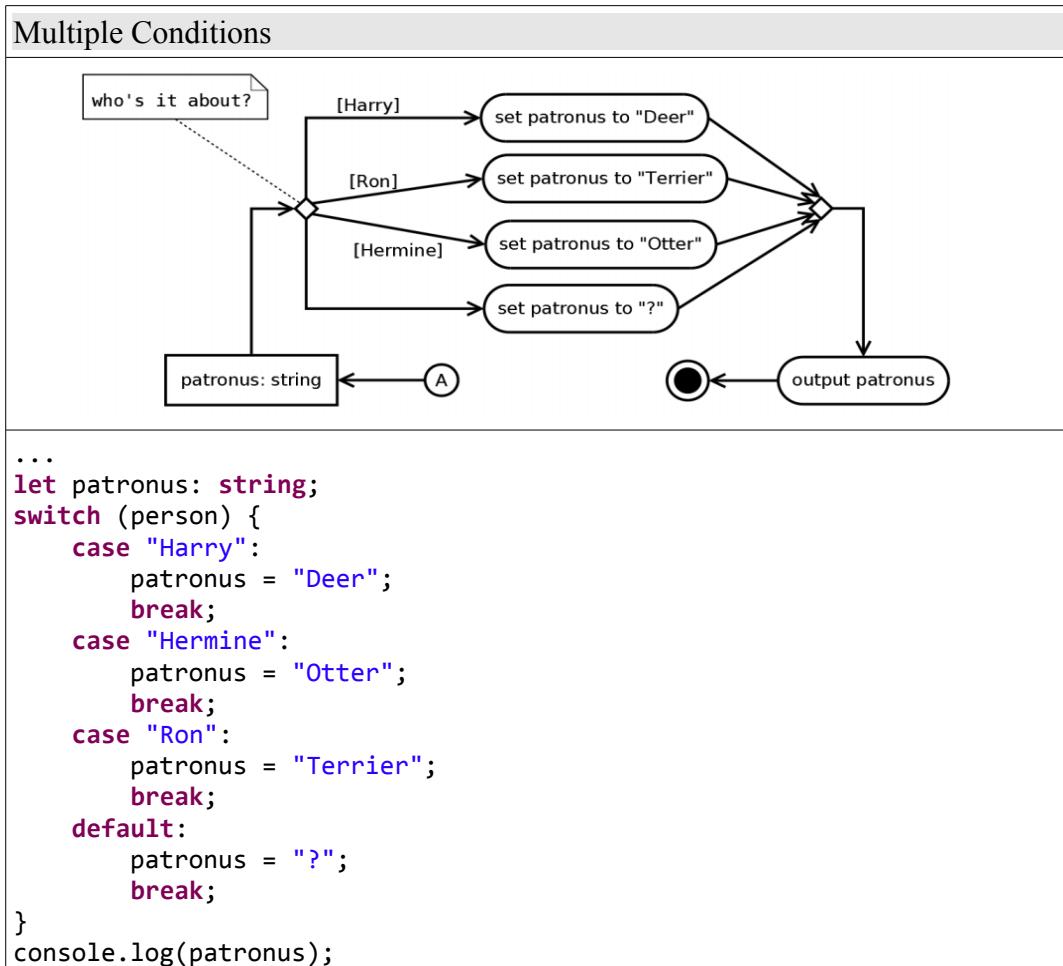
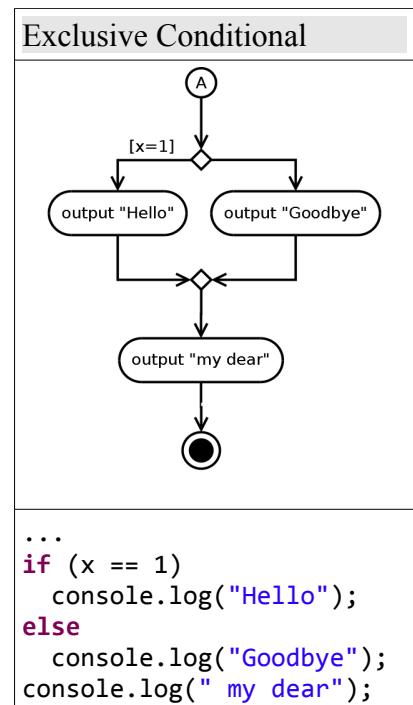
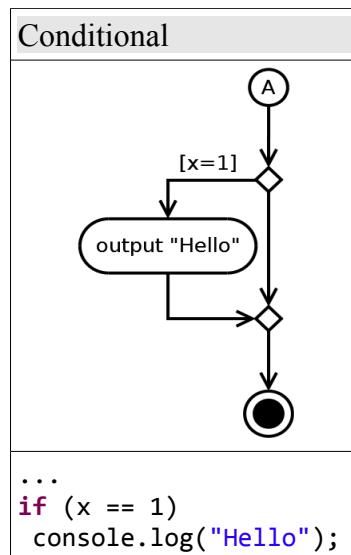
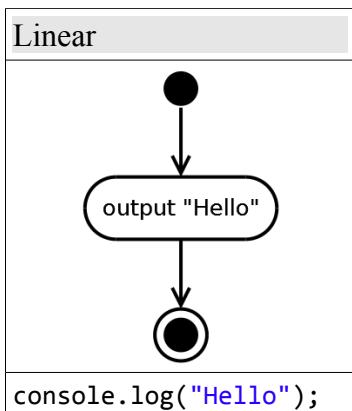
and their analogies in code (TypeScript)

Prof. Dipl.-Ing. Jirka R. Dell'Oro-Friedl
V1.1 ©HFU2019

1. Elements

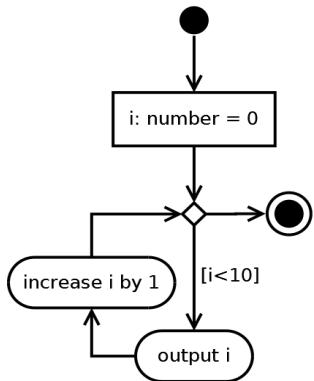
| | | | | |
|---------------|--|--|-----------|------------------------------------|
| ● | Startknoten (Initial Node) |  | Aktivität | Aktionsknoten (ActionNode) |
| ○ | Endknoten (ActivityFinalNode) |  | Daten | Objektknoten (ObjectNode) |
| ⊗ | Ablaufendknoten (FlowFinalNode) |  | Notiz | Notiz (Note) |
| (A) | Konnektor (Connector) |  | | |
| ◇ | Entscheidung und Zusammenführung (DecisionNode / MergeNode) |  | | |
| / \ | Teilung / Synchronisation (ForkNode / JoinNode) |  | | Zeitsignal (AcceptTimeEventAction) |
| + | Aufruf |  | Event | Signalempfang (AcceptEventAction) |
| ↗ [Bedingung] | Kontrollfluss / Objektfluss ActivityEdge (ControlFlow / ObjectFlow) |  | Event | Signalversand (SendSignalAction) |

2. Basic flow structures



3. Loops

Loop (Pre-Test)

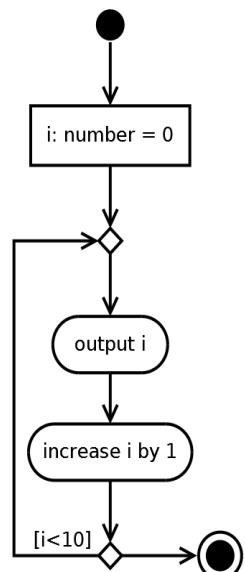


```

let i: number = 0;
while (i < 10) {
  console.log(i);
  i++;
}
      oder

for (let i: number = 0; i < 10; i++)
  console.log(i);
  
```

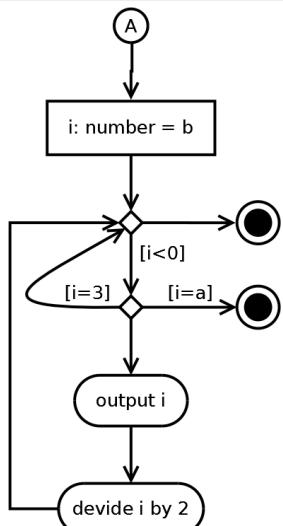
Loop (Post-Test)



```

let i: number = 0;
do {
  console.log(i);
  i++;
} while (i < 10);
  
```

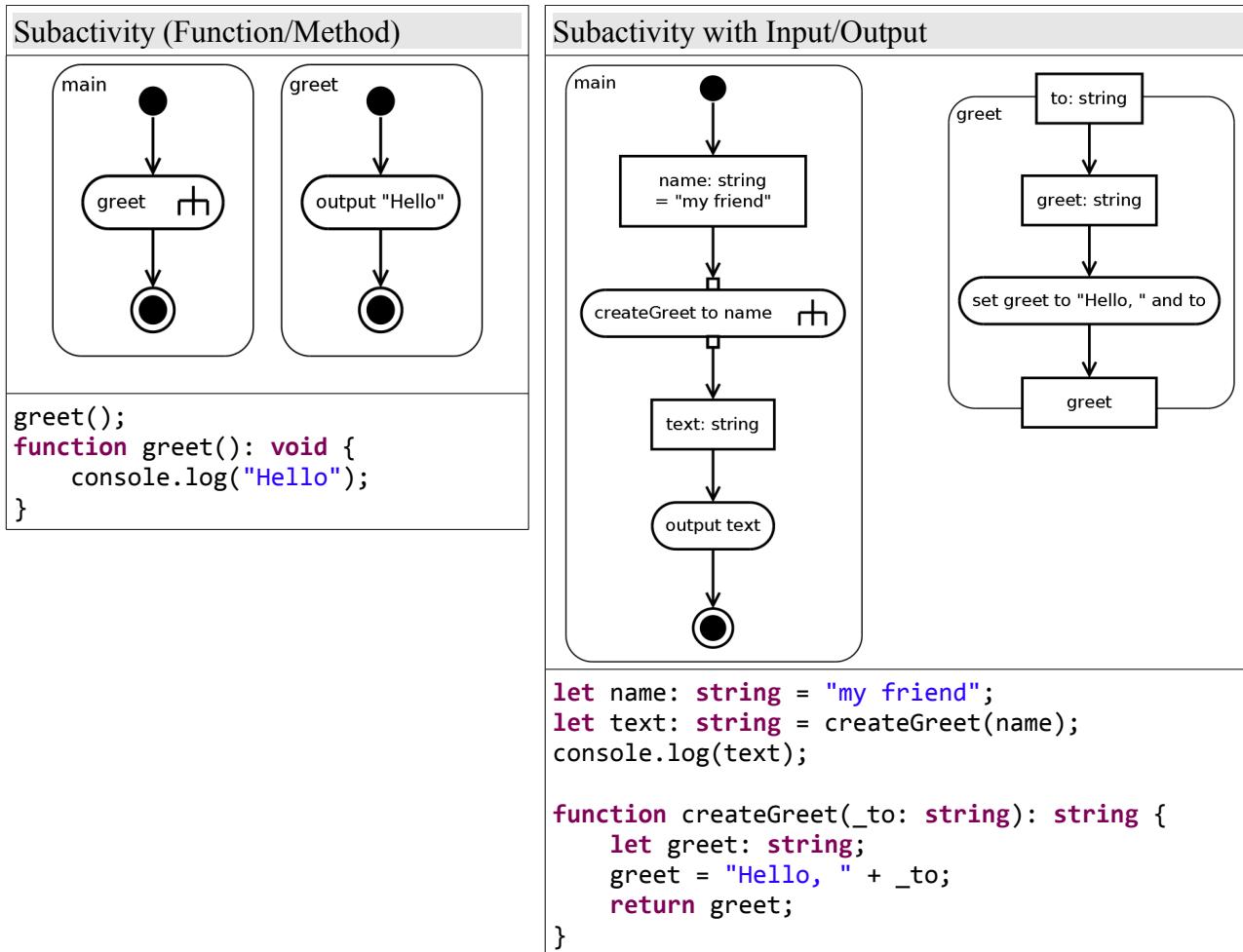
Loop with additional control conditions



```

for (let i: number = b; i > 1; i/=2)
{
  if (i == 3)
    continue;
  if (i == a)
    break;
  console.log(i);
}
  
```

4. Subactivities



5. Signals

