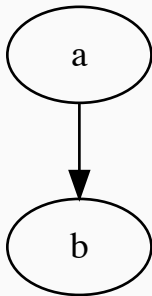


# The DOT language

---

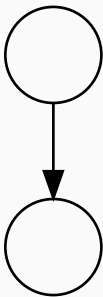
Pierce Edmiston

```
digraph {  
  a -> b;  
}
```

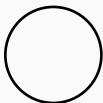
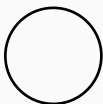


## Node shapes

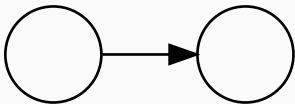
```
digraph {  
  node[shape=circle label=""];  
  a -> b;  
}
```



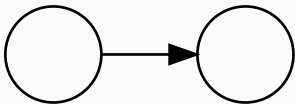
```
digraph {  
  node[shape=circle label=""];  
  edge[style=invis];  
  a -> b;  
}
```



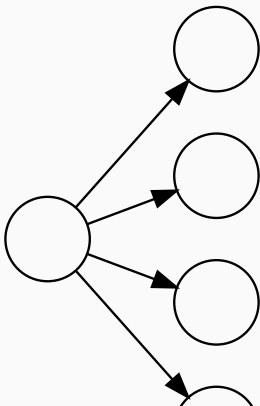
```
digraph {  
  graph[rankdir=LR];  
  node[shape=circle label=""];  
  a -> b;  
}
```



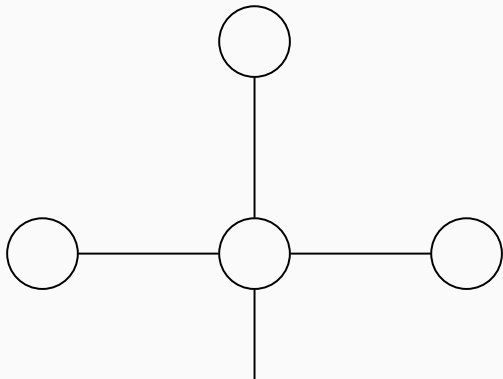
```
digraph {  
    rankdir=LR;  
    node[shape=circle label=""];  
    a -> b;  
}
```



```
digraph {  
    rankdir=LR;  
    node[shape=circle label=""];  
    a -> {b, c, d, e};  
}
```



```
graph {  
    rankdir=LR;  
    layout=circo;  
    node[shape=circle label=""];  
    a -- {b, c, d, e};  
}
```

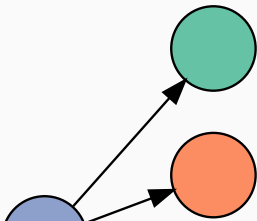




```
graph {  
    rankdir=LR;  
    layout=circo;  
    node[shape=circle label=""];  
    a -- {b, c, d, e};  
    b -- {c, d, e};  
    c -- {d, e};  
    d -- e;  
  
    a[label="Pierce"];  
    b[label="Willy"];  
    c[label="Ed"];  
    d[label="Dan"];  
    e[label="Josh"];  
}
```

## Graph, Node, Edge attrs

```
digraph {  
    rankdir=LR;  
    node[shape=circle label="" style=filled];  
    a -> {b, c, d, e};  
    a[fillcolor="#8da0cb"]  
    c[fillcolor="#fc8d62"]  
    b, d, e[fillcolor="#66c2a5"]  
}
```



James's sklearn talk

```
from sklearn import datasets
from sklearn.tree import DecisionTreeClassifier, export_graphviz
import graphviz

# ...
```

```
def plot_decision_tree(model: DecisionTreeClassifier):
    iris = datasets.load_iris()
    dot_data = export_graphviz(model, out_file=None,
                                feature_names=iris.feature_names,
                                class_names=iris.target_names,
                                impurity=False,
                                filled=True,
                                rounded=True,
                                special_characters=True)
    graph = graphviz.Source(dot_data)
```

## Visualizing Wikipedia article revision history, graph function

```
def graph(edges, nodes=None, remove_labels=False):  
    """Create a revision history Digraph from a pandas Data  
    g = graphviz.Digraph(graph_attr={'rankdir': 'LR'})  
  
    if nodes is None:  
        labels = set(edges.iloc[:, 0]).union(set(edges.iloc[:, 1]))  
        nodes = pd.DataFrame({'name': list(labels), 'label': ''})  
  
    node_data = nodes.to_dict('index')  
    for _, attrs in node_data.items():  
        if remove_labels:  
            attrs['label'] = ''  
        g.node(**attrs)  
  
    g.edges([(from_node, to_node) for _, (from_node, to_node) in edges.items()])
```