

# SWITCHES VS. IF-ELSE LADDERS

Multi-way Branches

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#### 

# SWITCH

- Single test expression
- Only integers
- Expression compared to constants
- Implied ==
- Implied logical-OR

switch (choice)
{
 case 'A' :
 break;
 case 'B' :
 break;
 case 'C' :
 break;
 default :
 break;
}

## **IF-ELSE LADDER**

- Each branch requires an expression
- All data types

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- Expression compared to constants, variables, function calls, other expressions
- ==, <, <=, >, >=
- &&, ||, !

```
if (choice == 'A')
{
          . . .
}
else if (choice == 'B')
{
          . . .
}
else if (choice == 'C')
{
          . . .
}
else
{
          . . .
}
```



## SIMPLE BRANCH

```
switch (choice)
                                   if (choice == 'A')
       case 'A' :
                                          • • •
              • • •
              break;
                                   else if (choice == 'B')
       case 'B' :
              • • •
                                          • • •
              break;
       case 'C' :
                                   else if (choice == 'C')
              • • •
             break;
                                         • • •
       default :
                                   else
               • • •
              break;
                                          • • •
```