

A photograph of four students in a library setting. A young man in a grey t-shirt is smiling and looking at a laptop. A young woman with glasses is looking at the laptop. Another young woman is looking at a book. A young man is looking at the laptop. They are all sitting at a table. Bookshelves are visible in the background.

Controlling Program Flow

'switch' statements

Conditional Logic - switch

- A 'switch' statement is an elegant solution to a complex, repetitive if-else-if-else statement.

- The general syntax is:

```
switch(variableToExamine){  
    case compile_time_constant:  
        code;  
        break;  
    default:  
        code;  
        break;  
}
```



Conditional Logic - switch

- The types you can *switch* on are as follows:
 - byte, char, short, int
 - Byte, Character, Short, Integer
 - String
 - enum's
 - var (if it resolves to one of the above)
- You cannot switch on a *boolean*, *long*, *float* or *double* variable (or their wrappers).
- The *case* labels must be compile-time constants of the same type as the *switch* variable.



Conditional Logic - switch

- The *case* labels must be in range e.g. if you *switch* on a *byte*, don't have a *case* label of 200.
- The *case* labels must be unique i.e. duplicate *case* labels not allowed.
- *default* can be placed anywhere; regardless of its position, it is only executed if there is no matching *case*!
- Implicit casting can be performed between the *case* label and the *switch* variable type.

