Web Development
* C# Programming
* Querying SQL
* Html, CSS & JS
* Asp.Net MVC

Intro to Programming Using C#
→ Input / output
→ Variable / Datatypes
→ Expressions / Methods
→ if / switch
→ Loops (while, do, for)
→ Arrays, List, dict
→ Methods
→ OOP

File R/W
Connect DB
GUI
HR System

```
[Course] ──▷ [Trainer]
   │
   │
[Student]
```
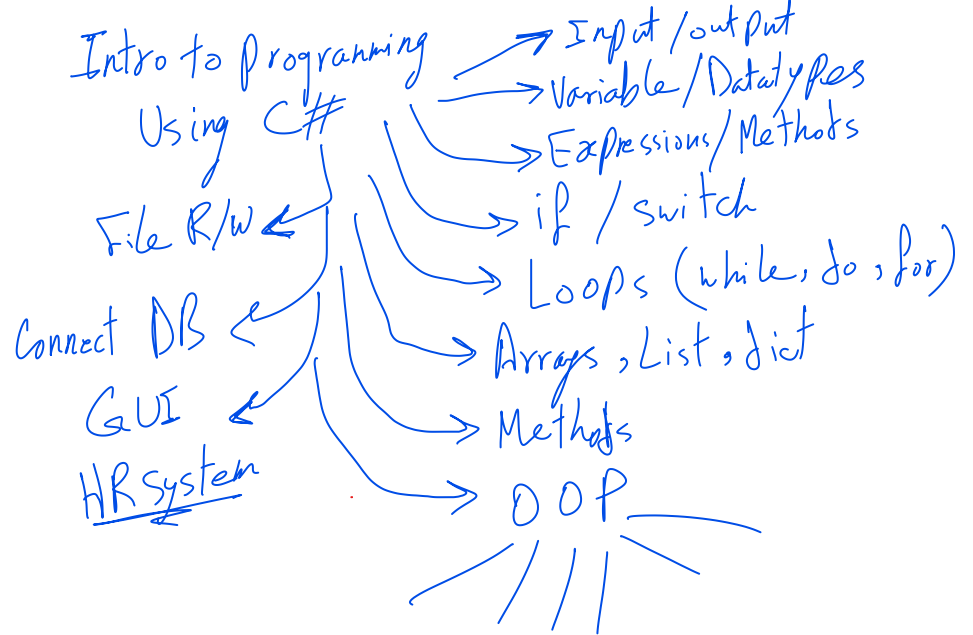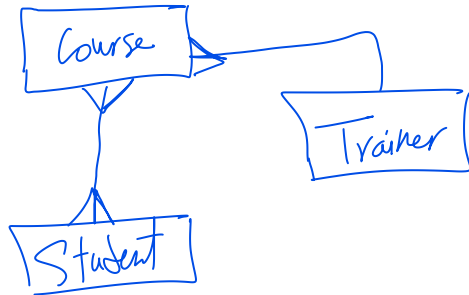
Errors:
* Syntax
* Runtime
* Logic

input
storage
process
output

Salary → Variable
$\boxed{7000}$
byte, short, int, long
float, double
char, string

$annualSalary = Salary * 12$

---

mark $\boxed{23}$ fullMark $\boxed{25}$

$$pct = \frac{mark}{fullMark} * 100$$

92

Math Operators
( )
① → * / %
② → + -

3 + 6 / 3
       2
3 + 2 = 5

2 * 6 / 3
   12
   4

$5 / 2 \Rightarrow 2$
$5.0 / 2 \Rightarrow 2.5$
$7 \% 3 \Rightarrow 1$
$11 \% 3 \Rightarrow 2$

int x = 5;
int y = 2;

(double) x / y $\Rightarrow 2.5$
$10 \% 2 \Rightarrow 0$

Assignment Operators

int $x = 5$;

$x = 3$;

$x = (x + 5)$;

$x += 2$

$x *= 3$

$x -= 5$

---

x

$\boxed{5}$

x

$\cancel{8}$

10

30

25

26

27

28

27

$x++$;

$cw(x++)$; $\implies 26$

$cw(++x)$; $\implies 28$

$cw(x--)$; $\implies 28$

Weight   height

$\boxed{68}$ $\boxed{182}$

$$bmi = \frac{weight}{(height/100) * (height/100)}$$

$20.52 \cdot \sim$

$$bmi = \frac{weight}{(height/100)^2}$$

< 18.5 Underweight

< 25 Normal

< 30 Overweight

Obese

Math Methods

Math.Pow $(5, 2) \implies 25$

Math.Sqrt $(25) \implies 5$

Math.Max $(5, 2) \implies 5$

Math.Min $(5, 2) \implies 2$

Math.Round $(19.637) \implies 20$

Math.Round $(19.637, 1) \implies 19.6$

:

:

---

if (bool-expr) {

———— (true)

}

———— (always)

---

if (bool-expr) {

———— (true)

} else {

———— (false)

}

———— (always)

Relational Operators

$>, >= , <, <=$

$== , !=$

$x = 5$ $\boxed{5}$

$x == 3$ $x != 3$

false   true

```
if ( bool-expr ) {
_____
_____                    (T)

} else if ( bool-expr ) {
       _____
       _____             (F,T)

} else if ( bool-expr ) {
   _____
   _____                 (F,F,T)

}
:
else {
_____
_____                    (all false)

}
_____
_____                    (always)
```

Logical Operators

bool-expr && bool-expr
          ||
     ! bool-expr

---

day	day
1-5 ⟹ Work-day	7,1-4 ⟹ Work-day
6,7 ⟹ off-day	5,6 ⟹ off-day
else ⟹ Invalid	else ⟹ Invalid