

what's 7 \* 4?  
 >> 28  
 Correct  
 what's 2 \* 9?  
 >> 13  
 Wrong  
 what's . . . ?  
 >>  
 \_\_\_\_\_?  
 >>  
 \_\_\_\_\_?  
 >>  
 \_\_\_\_\_  
 Your score 3 out of 5

Enter num of std.: 4  
 Enter exam full Mark: 20  
 Enter std. mark: 15  

$$Pct = \frac{mark}{fullMark} \times 100$$
 >= 50 Pass  
 Fail

string x = "Hello";  
 cw(x) → Hello  
 cw(x[0]) → H  
 cw(x.Length) → 5

| x |   |   |   |   |
|---|---|---|---|---|
| H | e | l | l | o |
| 0 | 1 | 2 | 3 | 4 |

x. ↑ access operator  
↑ Methods

char. 

|  |
|--|
|  |
|  |
|  |

Ahmed123 X  
 Length 20 Ahmed20 ✓  
 ① at least 8 char  
 ② at least 2 upper isUpper(-)  
 ③ at least 2 digits isDigit(-)

| upperCount | digitCount |
|------------|------------|
| 0          | 0          |
| 1          | 1          |
| 2          | 2          |
|            | 3          |
|            | 4          |

Print first 50 prime number

number: 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, . . . .

print: 2, 3, 5, 7, 11  
all cannot divide → prime → print  
one divide → break → not prime → no print

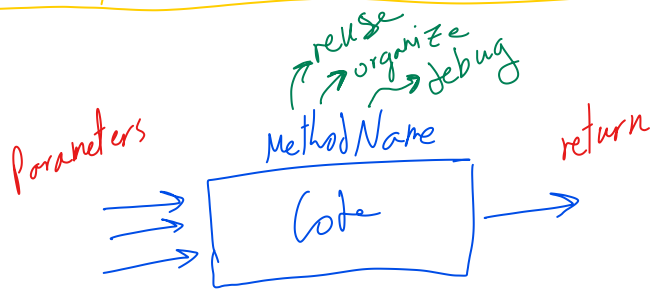
while \_\_\_\_\_  
 for \_\_\_\_\_  
 if \_\_\_\_\_  
 break

$$\frac{x}{8}, \frac{y}{24}$$

$$\frac{x}{6}, \frac{y}{9}$$

| gcd | div |
|-----|-----|
| 1   | 2   |
| 2   | 3   |
| 4   | 4   |
| 8   | 5   |
|     | 6   |
|     | 7   |
|     | 8   |

| gcd | div |
|-----|-----|
| 1   | 2   |
| 3   | 3   |
|     | 4   |
|     | 5   |
|     | 6   |



## Call Method

Math.Min(5,2) → 2

Math.Pow(5,2) → 25

char.IsUpper('A') → T

⋮

## Define

modifiers return-type Method Name ( Parameters ) {

⋮

}

weight height

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

< 18.5 Under weight

< 25 Normal

< 30 Over weight

obese

→ CalcBMS(w,h)

→ GetStatus(bmi)

mark      fullMark  
  

GetPercent(-,-)

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

> 85 Excellent

> 75 V. Good

> 65 Good

>= 50 Pass

Fail

GetGrade(-)

int[] x = {5, 25, 13, 23};

chw(x); → Array

chw(x[0]); → 5

chw(x[1]); → 23

chw(x.Length); → 4

x

|   |    |   |
|---|----|---|
| 0 | 5  | 4 |
| 1 | 25 | 3 |
| 2 | 13 | 2 |
| 3 | 23 | 1 |
|   | ⋮  |   |

Declaration      creation  
int[] y = new int[5];

y[0] = 13; } Initialization

y

|   |    |
|---|----|
| 0 | 13 |
| 1 | 0  |
| 2 | 0  |
| 3 | 0  |
| 4 | 0  |

Enter num of std.: 5

Enter std. mark: 37

~ ~ ~ : 73

~ ~ ~ : 58

~ ~ ~ : 66

~ ~ ~ : 41

marks

|    |     |
|----|-----|
| 37 | → D |
| 73 | → A |
| 58 | → B |
| 66 | → A |
| 41 | → D |

A → m ≥ best - 10

B → m ≥ best - 20

C → m ≥ best - 30

D → m ≥ best - 40

F → else

best = Max()

Enter num of emps.: 4

Enter emp salary: 7000

~ ~ ~ : 13000

~ ~ ~ : 5000

~ ~ ~ : 15000

avg = Average() → 10000

salaries

|       |
|-------|
| 7000  |
| 13000 |
| 5000  |
| 15000 |

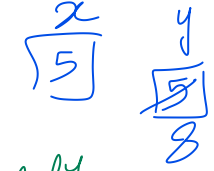
Count  
0  
1  
2

int x = 5;

int y = x;

y += 3;

Copy Value



int[] x = {10, 20, 30}

int[] y = x;

y[2] += 3;

Copy Reference

