- Step 1: Students download given materials
- Step 2: Students read questions and prepare answers in the given template

Step 3: Prepare for submit

- + For each question, please create two sub-folders: run and src
- + Copy *.exe file into run folder, *.c file into src folder

Step 4: Submit solution for each question

Total questions: 10
Total time: 85 minutes

Q1: (21)

Write a C program to read height (h) and width (w) of rectangle, then compute and display the perimeter and area of rectangle.

Perimeter of rectangle = 2 * (height + width)

Area of rectangle = heighe * width

Examples of output for case: height =5; width = 6;

5 6		
OUTPUT: 22		
30		

Q2: (28)

Write a C program to allow users to enter a character (c), then print out its hexadecimal presentation and decimal value..

Examples of output for case:

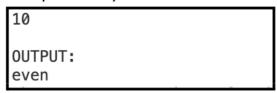
а	
OUTPUT	
0x61 97	

Q3: (32)

Write a C program to check and print out whether a given number is even or odd.

- + If number is even, then print out: even
- + If number is odd, then print out: odd

Examples of output for case:



Q4: (34)

Write a C program to read temperature setting of aircondion and display a suitable message according to the temperature as following:

- + Temp <= 16 then Freezing mode
- + Temp 17-22 then Cold mode
- + Temp 23-27 then Cool mode
- + Temp >=28 then Its Room modet

Examples of output for case:

```
25
OUTPUT:
Cool mode
```

Q5: (418)

Write a program to input an integer number N, then calculate and display on screen the largest of number m with condition:

$$1 + 2 + 3 + ... + m < N$$

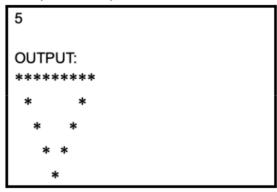
Examples of output for case:

10		
OUTPUT: 3		

Q6: (411)

Write a program to input an integer number N, then display on screen a hollow inverted pyramid star pattern of height N.

Examples of output for case:



Q7: (1124)

Write a program in C to allow users to enter array of n integers, then print out the first prime number. If prime number is not found, then print out -1.

Examples of output for case

```
10
4 5 8 7 2 6 5 8 7 2
OUTPUT:
5
```

Q8: (1112)

Write a program in C to find the second smallest element in an array. *Examples of output for case:*

```
10
2 2 4 7 7 7 3 6 6 6
OUTPUT:
3
```

Q9: (1314)

Write a program in C to allows users to enter a string (o), insert underscore _ after each three characters in string.

Examples of output for case:



Q10: (1315)

Write a program in C to allows users to enter a string (o), then check whether string is symmetry.

- + If string is symmetry, then print out 1
- + Else, then print out -1.

Examples of output for case:

abcba	aacbb
OUTPUT:	OUTPUT:
1	-1