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:

```
a

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:

```
10

OUTPUT:
even
```

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:

$$1 + 2 + 3 + \ldots + m < N$$

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:

```
5

OUTPUT:
*********
 *       *
  *     *
   * *
    *
```

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
```

```
10
4 6 8 4 6 6 4 8 6 6

OUTPUT:
-1
```

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:

```
prf192fpt

OUTPUT:
prf_192_fpt
```

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

OUTPUT:
1
```

```
aacbb

OUTPUT:
-1
```