

# CS19101 PDS laboratory

## Assignment 2

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Write programs for problems 1,2 and 3 in three different files named `A1_1.<Roll no.>.c`, `A1_2.<Roll no.>.c` and `A1_3.<Roll no.>.c` respectively (without the '<' and '>'). Put these three files into a compressed directory named `A1.<Roll no.>.zip` and submit it.

**Example:** If your roll number is 19DEP99999, then the names of your files should be `A1_1_19DEP99999.c`, `A1_2_19DEP99999.c` and `A1_3_19DEP99999.c`.

**This is an assignment on expressions and conditionals. You are not allowed to use loop/iteration, array or function.**

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1. In this program you will take co-ordinates of three points  $(a_1, b_1)$ ,  $(a_2, b_2)$  and  $(a_3, b_3)$  from the user through keyboard. Assume that all the co-ordinates are integers. Print on the screen whether the three points are collinear. Avoid using floating point arithmetic; use only integer arithmetic in the program.

Sample input and output:

```
Enter a1:0
Enter b1:0
Enter a2:1
Enter b2:2
Enter a3:3
Enter b3:6
The points are collinear.
```

```
Enter a1:0
Enter b1:1
Enter a2:3
Enter b2:1
Enter a3:5
```

Enter b3:5  
The points are not collinear.

[20 marks.]

2. Take an integer between 1 and 99 as input through keyboard. Print the number in words on the screen.

Sample input and output:

Enter date: 56  
fifty six

[20 marks.]

3. Take a date of 2019 as input from the user in *ddmm* format. Example: 2708 will stand for August 27, 2019. Store the input date in an integer variable. Print the day as output on the screen. You may use the fact that January 1, 2019 is Tuesday.

Sample input and output:

Enter date: 0204  
Tuesday

[20 marks.]