1. Create a folder (directory) **LABT1A** in your home directory.

2. Create a C program file **prog.c** in the folder **LABT1A**.

3. The C program **prog.c** implements the following:

   (a) It reads an integer n from the keyboard such that $10 < n < 30$. If the user enters an invalid input, the code repeats the command of asking the user for the integer n until the input is correct.

   (b) If n is divisible by 3 then it calculates and prints out the sum of the series

   $$\sum_{i=n-1}^{2n-1} i^2$$

   Otherwise (i.e. if n is NOT divisible by 3), it calculates and prints out the sum of the series
   $$\sum_{i=n+1}^{2n+1} i^2$$

Test data and expected output:

```
Enter an integer between 10 & 30 :8
Invalid input: Enter an integer between 10 & 30 :14
Sum of the series with n=14 is 7540

Enter an integer between 10 & 30 :15
Sum of the series with n=15 is 7736
```

Write the following commands in the terminal and write down the output against it.
1. pwd
Output:

2. ls
Output:

3. ./a.out (with input n=22)
Output: