Note:

1. Indentation of the program is a must, without which the program **will not** be evaluated.
2. **Do not** manipulate any values or expressions to get the output.
3. Name the file with **your ID Number**. E.g.:2016A7PS1203G.sh
4. Upload the <You ID Number>.sh file in photon **Online_Submission** link under **Labs** section well before session expiry time.

Question

Consider record.txt which contains list of student records consisting of ID, First name and Last name separated by zero or more spaces and one or more tabs.

Sample input in record.txt :

2003A7PS0203G   Amit   Patel

2003A3PS0300G   Sumit   Arora

2003B3PS1120G   Abhinva   Gupta

2003A3PS0024G   Manish   Khurana

2003A7PS0001G   Adharv   Sharat

Write a shell program to read each of the student record, extract 9th to 12th position of the ID. For example, from the first record, extract 0203 [from ID 2003A7PS**0203**G, extract 0203]. Find whether this number [203] is UGLY number or not.
If the number is UGLY, then store ID, First name and Last name in file ugly.txt. [The separator between ID and First name should be two tabs and the separator between First name and Last name should be five spaces].

Definition of Ugly numbers:
        Ugly numbers are the numbers whose only prime factors are 2, 3 or 5.

To check whether the number is ugly, follow steps:

1. Divide the number [say num1] with greatest divisible power of 2. Store the result in num2.

2. Divide num2 with greatest divisible power of 3. Store the result in num3.

3. Divide num3 with greatest divisible power of 5. Store the result in num5.

4. If num5 is 1, then the number is an UGLY number. Otherwise it is NOT an UGLY number.

Your program should check early exit condition. i.e., if num1, num2 or num3 becomes 1, then it should it should decide the number as UGLY number.

Example:

Check whether 300 is UGLY number or not.

1. Greatest divisible power of 2 which can divide 300 is 4. So num2 = 300/4 = 75.

2. Greatest divisible power of 3 which can divide 75 is 3. So num3 = 25.

3. Greatest divisible power of 5 which can divide 25 is 25. So num5 = 1

4. num5 is 1, so the number 300 is UGLY number.

Example:

Check whether 1120 is UGLY number or not.

5. Greatest divisible power of 2 which can divide 300 is 32. So num2 = 1120/32 = 35.

6. Greatest divisible power of 3 which can divide 35 is 1. So num3 = 35.

7. Greatest divisible power of 5 which can divide 35 is 5. So num5 = 7

8. num5 is 7, so the number 1120 is NOT an UGLY number.

Sample output in Ugly.txt

2003A3PS0300G   **Sumit   Arora**

2003A3PS0024G   **Manish   Khurana**

2003A7PS0001G   **Adharv   Sharat**