

Write a C Program to generate first n Ugly Numbers

```
#include <stdio.h>
```

```
#include <string.h>
```

```
int main()
```

```
{
```

```
int n,x=0;
```

```
printf("Input an integer number: ");
```

```
scanf("%d",&n);
```

```
if (n <= 0) {
```

```
    printf("Input a correct number.");
```

```
}
```

```
while (n != 1)
```

```
{
```

```
    if (n % 5 == 0)
```

```
    {
```

```
        n /= 5;
```

```
    }
```

```
    else if (n % 3 == 0)
```

```
    {
```

```
        n /= 3;
```

```
    }
```

```
    else if (n % 2 == 0)
```

```
    {
```

```
        n /= 2;
```

```
    }
```

```

else
{
    printf("It is not an ugly number.\n");

    x = 1;

    break;
}
}

        if (x==0)
        {
            printf("It is an ugly number.\n");
        }
}

```



The screenshot shows a C program in a code editor. The program prompts the user to input an integer number. If the input is less than or equal to 0, it prompts for a correct number. Otherwise, it enters a while loop that divides the number by 5, 3, and 2 until it is no longer divisible by any of them. If the final number is 1, it is not an ugly number; otherwise, it is an ugly number.

```

1 #include <stdio.h>
2 #include <string.h>
3
4 int main()
5 {
6     int n,x=0;
7     printf("Input an integer number: ");
8     scanf("%d",&n);
9
10    if (n <= 0) {
11        printf("Input a correct number.");
12    }
13    while (n != 1)
14    {
15        if (n % 5 == 0)
16        {
17            n /= 5;
18        }
19        else if (n % 3 == 0)
20        {
21            n /= 3;
22        }
23        else if (n % 2 == 0)
24        {
25            n /= 2;
26        }
27        else
28        {

```

Input: 7

Output: It is not an ugly number.

..Program finished with exit code 0
Press ENTER to exit console.