

```
int Factorial(int M)
```

```
if (M == 0)
```

```
return 1;
```

```
else
```

```
return M * Factorial(M-1)
```

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

```
int Factorial(int n)
```

```
int main() {
```

```
int N, R, F
```

```
printf("Enter your Integer: ");
```

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

```
for (M=1; R!=0; M++){
```

```
    F = Factorial(M)
```

```
    R = F % (N * N)
```

```
}
```

```
printf("Wanted number is %d", M);
```

```
return 0; } Dear professor,
```

```
} I saw what was being asked from me to do  
for the homework but nevertheless I didn't understand  
what was asked in HW to do in program.
```

You will see that, (I hope) managed to create
a program which finds the least number (M)
whose factorial is divisible by N^2 . Also, you
may see first the recursive f-on I used
to find $M!$. I don't think this is supposed to be
the whole homework, but I hope you will at least appreciate this.