

TestQ.3

```
#include <stdio.h>
#include <conio.h>
void main ()
{
    int b, s;
    float Tax;
    printf ("Enter salary = ");
    scanf ("%d", &s);
    printf ("Enter 0 for male & 1 for female ");
    scanf ("%d", &b);
    printf ("Enter M for married & U for unmarried ");
    fflush (stdin);
    scanf ("%c", &ch);

    if (b == 1) {
        if (ch == 'M')
        {
            if (s <= 400000)
            {
                Tax = (float)s * 0.01;
            }
            else
            {
                Tax = (float)(400000 * 0.01) + (s - 400000) * 0.01;
            }
        }
    }
}
```

```
else if (ch == 'U')
```

```
{
```

```
    if (s <= 450000)
```

```
    {
```

```
        Tax = (float) s * 0.01;
```

```
    }
```

```
    else
```

```
    {
```

```
        Tax = (float) (450000 * 0.01) + (s - 450000) * 0.15;
```

```
    }
```

```
}
```

```
else
```

```
{
```

```
    print("Enter valid character");
```

```
}
```

```
}
```

```
else if (ch == 'M')
```

```
{
```

```
    if (ch == 'M')
```

```
    {
```

```
        if (s <= 450000)
```

```
        {
```

```
            Tax = (float) s * 0.01;
```

```
        }
```

```
        else
```

```
        {
```

```
            Tax = (float) (450000 * 0.01) + (s - 450000) * 0.15;
```

```
        }
```

```
}
```



```
else if (ch == 'v')
```

```
{
```

```
    if (s <= 500000)
```

```
    {
```

```
        Tax = (float)(500000 * 0.01);
```

```
    }
```

```
    else
```

```
    {
```

```
        Tax = (float)(500000 * 0.01);
```

```
        + (s - 500000) * 0.15;
```

```
    }
```

```
}
```

```
else
```

```
{
```

```
    printf("Enter a valid character");
```

```
}
```

```
    printf("Yearly tax paid = %.2f", Tax);
```

```
    return 0;
```

```
}
```

Q.1)

include <stdio.h>

void main()

{

int n, sum = 0, i;

printf ("Enter a no. ");

scanf ("%d", &n);

i = 1;

do

{

sum = sum + i;

i = i + 1;

}

while (sum < n);

if (sum == n)

{

printf ("Enter a no. is triangular ");

Num = sum;

for (j = 1; j <= Num; j = j + 1)

{

if (Num % i == 0)

{

count = 0;

for (k = 1; k <= j; k = k + 1)

{

if (j % k == 0)

{

count = count + 1;

}

if (count == 2)


```
{  
    printf("%d\t", i);  
}  
  
}  
  
}  
  
}  
  
else  
{  
    printf("Entered no. is not triangular");  
}  
  
getch();  
}
```

②

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

```
void main()
```

```
{
```

```
int num, dig, rem, sum = 0, sq = 0, rem;
```

```
printf("Enter any digit");
```

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

```
dig = num;
```

```
do {
```

```
    rem = num % 10;
```

```
    sum = sum + rem;
```

```
    num = num / 10;
```

```
} while (num != 0);
```

```
if (sum % 2 == 0)
```

```
{
```

```
    sum = temp 1;
```

```
do {
```

```
    rem = Temp 1 % 10;
```

```
    sq = sq + pow(rem, 2)
```

```
    temp 1 = temp 1 / 10;
```

```
} while (temp 1 != 0);
```

```
printf("Sum of square of digit is %d", sq);
```

```
}
```

```
else
```

```
{
```

```
    sum = temp 2;
```

```
do {
```

```
    rem = temp 2 % 10;
```

```
    sum = sum + rem;
```

```
    temp 2 = temp 2 / 10;
```



```
3 while (temp2 != 0)
    printf ("Sum of digit is %d", s);
```

```
3
```

```
getch ();
```

```
3
```

Q.2)

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

```
void main()
```

```
{
```

```
int num, sum = 0, i, fact, temp, rem, k;
```

```
printf("Enter a no=");
```

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

```
temp = num;
```

```
{
```

```
while (num != 0)
```

```
{
```

```
rem = num % 10;
```

```
fact = 1;
```

```
for (i = 1; i <= rem; i = i + 1)
```

```
{
```

```
fact = fact * i;
```

```
}
```

```
num = num / 10;
```

```
sum = sum + fact;
```

```
}
```

```
if (sum == temp)
```

```
{
```