20XC17 – C PROGARMMING LAB CA1 TEST

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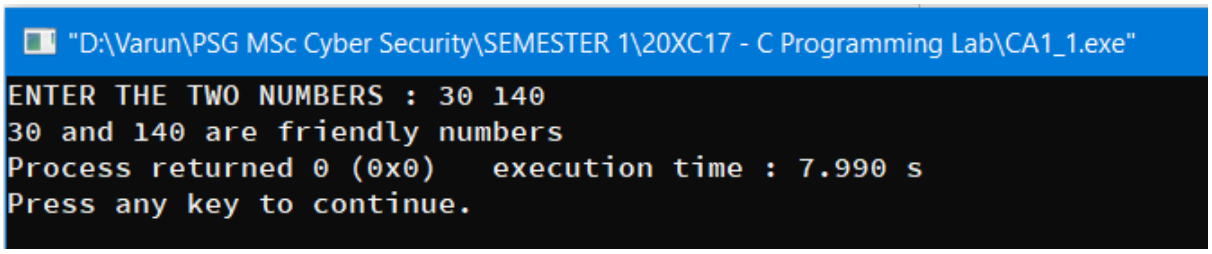
1. PROGRAM

```
#include <stdio.h>

int main()
{
   int Number_1, Number_2;
   int Sum_Of_Number1_Divisors = 0, Sum_Of_Number2_Divisors = 0 ;

   printf("ENTER THE TWO NUMBERS : ");
   scanf("%d %d", &Number_1, &Number_2);

   for(int i=1 ; i<=Number_1 ; i++)
   {
      if(Number_1 % i == 0)
         Sum_Of_Number1_Divisors = Sum_Of_Number1_Divisors + i;
   }

   for(int i=1 ; i<=Number_2 ; i++)
   {
      if(Number_2 % i == 0)
         Sum_Of_Number2_Divisors = Sum_Of_Number2_Divisors + i;
   }

   if((Sum_Of_Number1_Divisors/Number_1) == (Sum_Of_Number2_Divisors/Number_2))
      {
         printf("%d and %d are friendly numbers", Number_1, Number_2);
      }
```

```
    else
      {
      printf("%d and %d are not friendly numbers", Number_1, Number_2);
      }

    return 0;
}
```

OUTPUT:

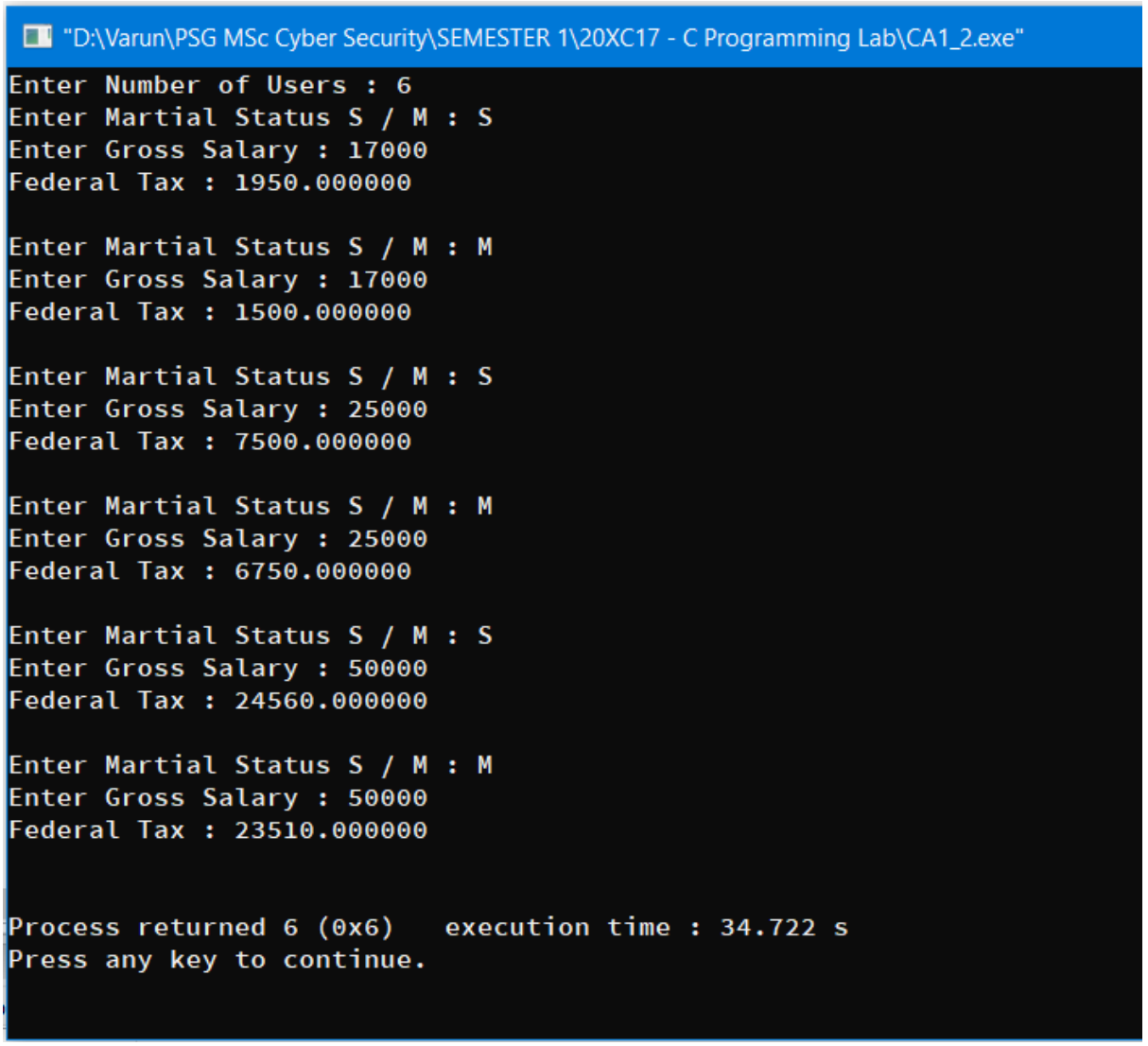


2. PROGRAM

```
#include<stdio.h>
void main()
{
    int No_Of_Users, Salary, i;
    float Tax;
    char Marital_Status;

    printf("Enter Number of Users : ");
    scanf("%d", &No_Of_Users);

    for(i=1 ; i<=No_Of_Users ; i++)
    {
      printf("Enter Martial Status S / M : ");
      scanf(" %c", &Marital_Status);
      printf("Enter Gross Salary : ");
      scanf("%d", &Salary);
```

```
        if(Marital_Status == 'S')
           Salary = Salary - 4000;
        else
           Salary = Salary - 7000;


        if(Salary >= 1000 && Salary <= 15000)
        {
           Tax = Salary*0.15;
           printf("Federal Tax : %f \n\n", Tax);
        }

        else if(Salary >= 15001 && Salary <= 40000)
        {
           Tax = (Salary*0.25 + 2250);
           printf("Federal Tax : %f \n\n", Tax);

        }
        else if(Salary > 40000)
        {
           Tax = (Salary*0.35 + 8460);
           printf("Federal Tax : %f \n\n", Tax);
        }

     }

}
```

OUTPUT :


"D:\Varun\PSG MSc Cyber Security\SEMESTER 1\20XC17 - C Programming Lab\CA1_2.exe"
Enter Number of Users : 6
Enter Martial Status S / M : S
Enter Gross Salary : 17000
Federal Tax : 1950.000000
Enter Martial Status S / M : M
Enter Gross Salary : 17000
Federal Tax : 1500.000000
Enter Martial Status S / M : S
Enter Gross Salary : 25000
Federal Tax : 7500.000000
Enter Martial Status S / M : M
Enter Gross Salary : 25000
Federal Tax : 6750.000000
Enter Martial Status S / M : S
Enter Gross Salary : 50000
Federal Tax : 24560.000000
Enter Martial Status S / M : M
Enter Gross Salary : 50000
Federal Tax : 23510.000000
Process returned 6 (0x6) execution time : 34.722 s
Press any key to continue.