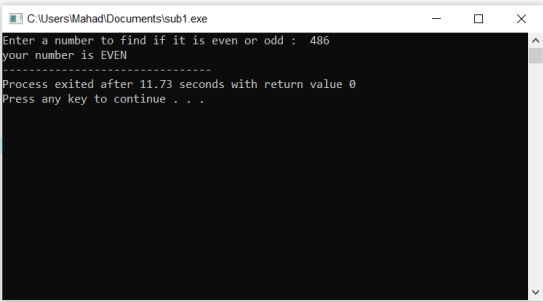


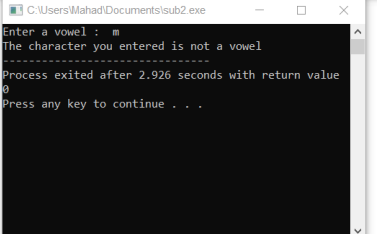
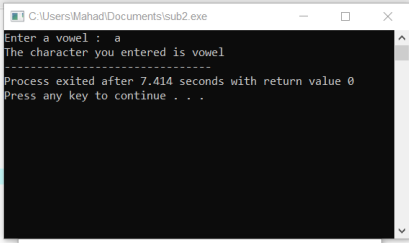
Question 1

```
sub4.c x sub6.c x sub5.c x sub7.c x sub8.c x sub3.c x sub2.c x sub1.c x
1 #include<stdio.h>
2 int main(){
3     int num,sol;
4     printf("Enter a number to find if it is even or odd : ");
5     scanf("%d", &num);
6
7
8
9     sol = num % 2;
10    if (num < 0) {
11        printf("Your number is negative, Enter a positive number");
12    }else if (sol == 0){
13        printf("your number is EVEN");
14    }else {
15        printf("Your number is ODD");
16    }
17
18 }
```



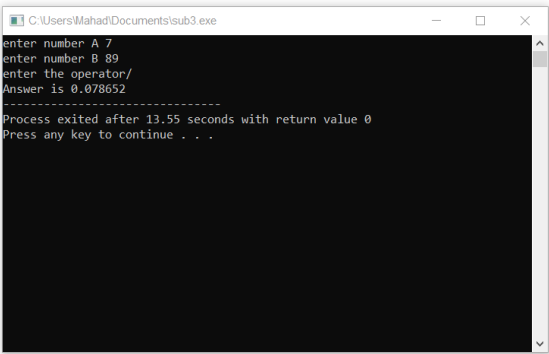
Question 2

```
sub4.c x sub6.c x sub5.c x sub7.c x sub8.c x sub3.c x sub2.c x sub1.c x
1 #include<stdio.h>
2 int main(){
3     char vl;
4     printf("Enter a vowel : ");
5     scanf("%c", &vl);
6
7     if (vl == 'a' || vl == 'e' || vl == 'i' || vl == 'o' || vl == 'u'){
8         printf("The character you entered is vowel");
9     }else {
10        printf("The character you entered is not a vowel");
11    }
12    return 0;
13 }
```



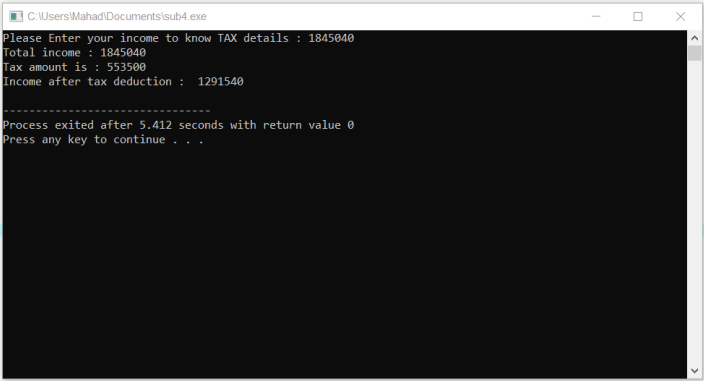
Question 3

```
sub4.c x sub6.c x sub5.c x sub7.c x sub8.c x sub3.c x sub2.c x sub1.c x
1 #include<stdio.h>
2
3 int main(){
4     float a,b,sol;
5     char optopr;
6     printf("enter number A ");
7     scanf("%f", &a);
8     printf("enter number B ");
9     scanf("%f", &b);
10    printf("enter the operator");
11    fflush(stdin);
12    scanf("%c", &optopr);
13
14    switch(optopr){
15        case '+':
16            sol = a + b;
17            printf("Answer is %f", sol);
18            break;
19        case '-':
20            sol = a - b;
21            printf("Answer is %f", sol);
22            break;
23        case '/':
24            sol = a / b;
25            printf("Answer is %f", sol);
26            break;
27        case '*':
28            sol = a * b;
29            printf("Answer is %f", sol);
30            break;
31        default:
32            printf("Invalid function");
33    }
34
35    return 0;
36 }
```



Question 4

```
sub4.c x sub6.c x sub5.c x sub7.c x sub8.c x sub3.c x sub2.c x sub1.c x
1 #include<stdio.h>
2
3 int main(){
4     int income, tax, afterTax;
5     printf("Please Enter your income to know TAX details : ");
6     scanf("%d", &income);
7     if(income <= 250000){
8         tax = 0;
9         afterTax = income;
10    }else if(income >= 250001 && income <= 500000){
11        tax = (income/100)*5;
12        afterTax = income - tax;
13    }else if(income >= 500001 && income <= 1000000){
14        tax = (income/100)*20;
15        afterTax = income - tax;
16    }else if(income > 1000000){
17        tax = (income/100)*30;
18        afterTax = income - tax;
19    }
20
21    if(income < 0){
22        printf("Invalid data, please enter the positive value.");
23    }else{
24        printf("Total income : %d \n", income);
25        printf("Tax amount is : %d \n", tax);
26        printf("Income after tax deduction : %d \n", afterTax);
27    }
28
29    return 0;
30 }
31
```



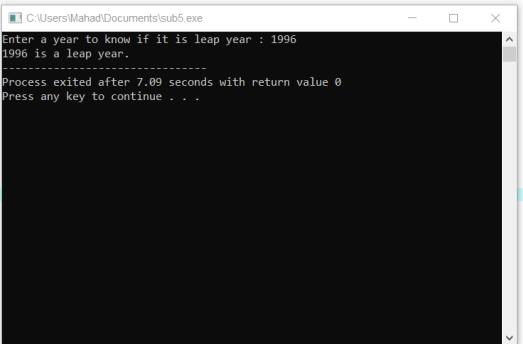
C:\Users\Mahad\Documents\sub4.exe

```
Please Enter your income to know TAX details : 1845040
Total income : 1845040
Tax amount is : 553500
Income after tax deduction : 1291540

-----
Process exited after 5.412 seconds with return value 0
Press any key to continue . . .
```

Question 5

```
sub4.c x sub6.c x [*] sub5.c x sub7.c x sub8.c x sub3.c x sub2.c x sub1.c x
1 #include<stdio.h>
2
3 int main(){
4     int year;
5     printf("Enter a year to know if it is leap year : ");
6     scanf("%d", &year);
7
8
9     if((year%4)==0){
10        printf("%d is a leap year.",year);
11    }else{
12        printf("%d is not a leap year.",year);
13    }
14
15    return 0;
16 }
17
18
19 //diving by 400 does not work, if you divide 2004 by the remainder will not be 0
20 // you can check
```



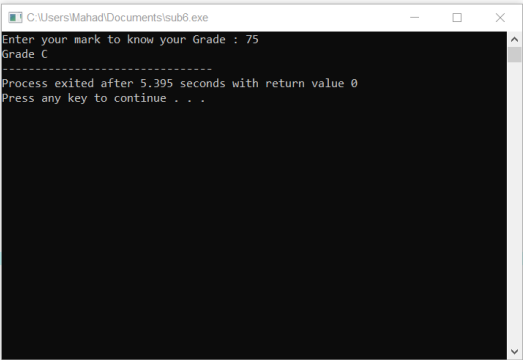
C:\Users\Mahad\Documents\sub5.exe

```
Enter a year to know if it is leap year : 1996
1996 is a leap year.

-----
Process exited after 7.09 seconds with return value 0
Press any key to continue . . .
```

Question 6

```
sub4.c x sub6.c x [*] sub5.c x sub7.c x sub8.c x sub3.c x sub2.c x sub1.c x
2
3 int main(){
4     int marks;
5     printf("Enter your mark to know your Grade : ");
6     scanf("%d",&marks);
7
8
9     if (marks >= 0 && marks <= 100){
10        marks = marks /10;
11        switch(marks){
12            case 10:
13                printf("Grade A");
14                break;
15            case 9:
16                printf("Grade A");
17                break;
18            case 8:
19                printf("Grade B");
20                break;
21            case 7:
22                printf("Grade C");
23                break;
24            case 6:
25                printf("Grade D");
26                break;
27            default:
28                printf("Grade F");
29        }
30    }else{
31        printf("Invalid data, please enter the correct marks");
32    }
33
34    return 0;
35 }
36
37
```



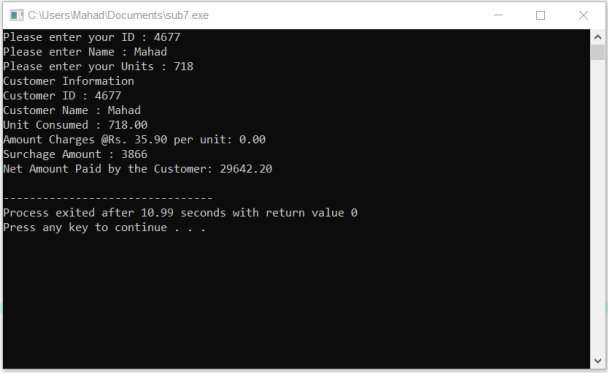
C:\Users\Mahad\Documents\sub6.exe

```
Enter your mark to know your Grade : 75
Grade C

-----
Process exited after 5.395 seconds with return value 0
Press any key to continue . . .
```

Question 7

```
sub4.c x sub6.c x [*] sub5.c x sub7.c x sub8.c x sub3.c x sub2.c x sub1.c x
1 #include<stdio.h>
2
3 int main(){
4     int id,srcharge_amount;
5     float unit,bill,sr_charge,netAmount;
6     char name[80];
7     printf("Please enter your ID : ");
8     scanf("%d",&id);
9     printf("Please enter Name : ");
10    scanf("%s",&name);
11    printf("Please enter your Units : ");
12    scanf("%f",&unit);
13
14    if (unit <= 199){
15        sr_charge=16.20;
16        bill = unit *sr_charge;
17    }else if (unit >= 200 && unit < 300){
18        sr_charge=10.10;
19        bill = unit *sr_charge;
20    }else if (unit >= 300 && unit < 500){
21        sr_charge=27.10;
22        bill = unit *sr_charge;
23    }else if (unit >= 500){
24        sr_charge=35.90;
25        bill = unit *sr_charge;
26    }
27
28    if (bill > 10000){
29        srcharge_amount = bill/100 * 15;
30        netAmount = bill + srcharge_amount;
31    }
32
33    if(unit < 0){
34        printf("Invalid units, Enter positive value");
35    }else {
36        printf("Customer Information \n");
37        printf("Customer ID : %d \n",id);
38        printf("Customer Name : %s \n",name);
39        printf("Unit Consumed : %.2f \n",unit);
40        printf("Amount Charges @Rs. %.2f per unit: %.2f \n",sr_charge);
41        printf("Surcharge Amount : %d \n",srcharge_amount);
42        printf("Net Amount Paid by the Customer: %.2f \n",netAmount);
43    }
44    return 0;
45 }
```



Question 8

```
sub4.c x sub6.c x [*] sub5.c x sub7.c x sub8.c x sub3.c x sub2.c x sub1.c x
1 #include<stdio.h>
2
3 int main(){
4     int n;
5     printf("Enter a positive n : ");
6     scanf("%d",&n);
7
8     if(n<=0){
9         printf("Error, please enter a postive Number.");
10    }else{
11        switch(n){
12            case 1:
13                printf("One");
14                break;
15            case 2:
16                printf("Two");
17                break;
18            case 3:
19                printf("Three");
20                break;
21            case 4:
22                printf("Four");
23                break;
24            case 5:
25                printf("Five");
26                break;
27            case 6:
28                printf("Six");
29                break;
30            case 7:
31                printf("Seven");
32                break;
33            case 8:
34                printf("Eight");
35                break;
36            case 9:
37                printf("Nine");
38                break;
39            default:
40                printf("n is greater 9");
41        }
42    }
43
44    return 0;
45 }
```

