

1.Problem Name: Write a C program to input temperature in Centigrade and convert to Fahrenheit.

Source Code:

```
#include<stdio.h>

int main (){

    float  celc,fahren;

    printf("Enter temperature in Centigrade : ");

    scanf("%f",&celc);

    fahren = (9*celc+160)/5;

    printf("The tempurature in Fahrenheit is : 
%.2f",fahren);

    return 0;

}
```

Input:

Enter temperature in Centigrade : -40

Output:

The tempurature in Fahrenheit is : -40.00

2.Problem Name: Write a C program to input radius of a circle from user and find diameter, circumference and area of circle.

Source Code:

```
#include<stdio.h>

int main (){

    float  r;

    printf("Enter radius of the circle : ");

    scanf("%f",&r);

    printf("The diameter of circle is : %.2f\n",2*r);

    printf("The circumference of circle is : 
%.2f\n",2*3.14*r);

    printf("The area of circle is : %.2f\n",3.14*r*r);

    return 0;

}
```

Input:

Enter radius of the circle : 2.5

Output:

The diameter of circle is : 5.00

The circumference of circle is : 15.70

The area of circle is : 19.62

3(1).Problem Name: Write a C program to input any two numbers from user and swap values of both numbers using third variable.

Source Code:

```
#include<stdio.h>

int main (){

    int a,b,c;

    printf("Enter 1st number : ");

    scanf("%d",&a);

    printf("Enter 2nd number : ");

    scanf("%d",&b);

    c=a;

    a=b;

    b=c;

    printf("1st number after swap : %d\n",a);

    printf("2nd number after swap : %d\n",b);

    return 0;

}
```

Input:

Enter 1st number : 20

Enter 2nd number : 30

Output:

1st number after swap : 30

2nd number after swap : 20

3(2).Problem Name: Write a C program to input any two numbers from user and swap values of both numbers using bitwise operator.

Source Code:

```
#include<stdio.h>

int main (){

    int a,b,c;

    printf("Enter 1st number : ");

    scanf("%d",&a);

    printf("Enter 2nd number : ");

    scanf("%d",&b);

    a=a^b;

    b=a^b;

    a=a^b;

    printf("1st number after swap : %d\n",a);

    printf("2nd number after swap : %d\n",b);

    return 0;

}
```

Input:

Enter 1st number : 20

Enter 2nd number : 80

Output:

1st number after swap : 80

2nd number after swap : 20

3(3).Problem Name: Write a C program to input any two numbers from user and swap values of both numbers using bitwise operator.

Source Code:

```
#include<stdio.h>

int main (){

    int a,b,c;

    printf("Enter 1st number : ");

    scanf("%d",&a);

    printf("Enter 2nd number : ");

    scanf("%d",&b);

    a=a+b;

    b=a-b;

    a=a-b;

    printf("1st number after swap : %d\n",a);

    printf("2nd number after swap : %d\n",b);

    return 0;

}
```

Input:

Enter 1st number : 50

Enter 2nd number : 650

Output:

1st number after swap : 650

2nd number after swap : 50

4.Problem Name: Write a C program to find maximum between three numbers using ladder if else or nested if.

Source Code:

```
#include<stdio.h>

int main (){

    int a,b,c;

    printf("Enter 1st number : ");

    scanf("%d",&a);

    printf("Enter 2nd number : ");

    scanf("%d",&b);

    printf("Enter 3rd number : ");

    scanf("%d",&c);

    if(a>b){

        if(a>c)printf("1st number %d is maximum",a);

        else printf("3rd number %d is maximum",c);

    }

    else if(b>c){

        if(b>a)printf("2nd number %d is maximum",b);

        else printf("3rd number %d is maximum",c);

    }

    else printf("3rd number %d is maximum",c);

    return 0;

}
```

Input: Enter 1st number : 10
 Enter 2nd number : 27
 Enter 3rd number : 25

Output: 2nd number 27 is maximum

5.Problem Name: Write a C program to check a given year is leap year or not.

Source Code:

```
#include<stdio.h>

int main (){

    int n;

    printf("Enter a year : ");

    scanf("%d",&n);

    if((n%4==0 && n%100!=0) || n%400==0){

        printf("The year you input is a 'Leap Year'");

    }

    else{

        printf("The year you input is 'Not a Leap Year'");

    }

    return 0;

}
```

Input:

Enter a year : 2006

Output:

The year you input is 'Not a Leap Year'

6.Problem Name: Write a C program to input a character from user and check whether given character is alphabet, uppercase, lowercase, digit or special character.

Source code:

```
#include<stdio.h>

int main (){
    char ch;
    printf("Enter a character : ");
    scanf("%c",&ch);
    if((ch>='a' && ch<='z') || (ch>='A' && ch<='Z')){
        printf("The character is : Alphabet\n");
        if(ch>='a' && ch<='z'){
            printf("And it is lowercase\n");
        }
        else{
            printf("And it is upercase\n");
        }
    }
    else if(ch>='0' && ch<='9'){
        printf("The character is : Digit\n");
    }
    else{
        printf("The character is : Special Character\n");
    }
    return 0;
}
```

Input: Enter a character : &

Output: The character is : Special Character

7.Problem Name: Write a C program to check whether an alphabet is vowel or consonant.

Source Code:

```
#include<stdio.h>

int main (){
    char ch;
    printf("Enter a alphabet : ");
    scanf("%c",&ch);
    if(ch=='a' || ch=='e' || ch=='i' || ch=='o' || ch=='u'
        || ch=='A' || ch=='E' || ch=='I' || ch=='O' || ch=='U'){
        printf("The alphbet '%c' is vowel",ch);
    }
    else{
        printf("The alphbet '%c' is consonent",ch);
    }
    return 0;
}
```

Input:

Enter a alphabet : A

Output:

The alphabet 'A' is vowel

8.Problem Name: Write a C program to calculate grade of a student.

Source Code:

```
#include<stdio.h>

int main (){

    float grade;

    printf("Enter number : ");

    scanf("%f",&grade);

    if(grade>=80 && grade<=100){

        printf("Grade A+");

    }else if(grade>=70 && grade<80){

        printf("Grade A");

    }else if(grade>=60 && grade<70){

        printf("Grade A-");

    }else if(grade>=50 && grade<60){

        printf("Grade B");

    }else if(grade>=40 && grade<50){

        printf("Grade C");

    }else{

        printf("Grade F");

    }

    return 0;

}
```

Input: Enter number : 35.25

Output: Grade F

9.Problem name: Write a C program to input week number (from 1 to 7) and print day of week name using switch.

Source Code:

```
#include<stdio.h>

int main(){

    int n;

    printf("Enter week number(1-7): ");

    scanf("%d",&n);

    switch(n){

        case 1:

            printf("Saturday");

            break;

        case 2:

            printf("Sunday");

            break;

        case 3:

            printf("monday");

            break;

        case 4:

            printf("Tuesday");

            break;

        case 5:

            printf("Wednesday");

            break;

        case 6:

            printf("Thursday");

            break;

        case 7:
```

```
        printf("Friday");  
    }  
    return 0;  
}
```

Input: Enter week number(1-7): 7

Output: Friday

10.Problem Name: Write a C program to input a number and check the given number is even or odd.

Source Code:

```
#include<stdio.h>  
  
int main(){  
    int n;  
    printf("Enter a number : ");  
    scanf("%d",&n);  
    if(n%2==0){  
        printf("The number '%d' is even",n);  
    }else{  
        printf("The number '%d' is odd",n);  
    }  
    return 0;  
}
```

Input: Enter a number : 101

Output: The number '101' is odd