

```
//create a program to check whether an year is leap or not
#include<stdio.h>
int main()
{
    int n;
    printf("enter the number");
    scanf("%d",&n);
    if((year%4==0 && year%100!=0)|| (year%400==0))
    {
        printf("%d is a leap year\n",year);
    }
    else{
        printf("%d is not leap year\n",year);
    }
    return 0;
}
```

// create a program for calculator using switch case

```
#include<stdio.h>
int main()
{
    char operator;
    float num1,num2,result;
    printf("enter an operator(+,-,*,/):");
    scanf("%c",&operator);
    printf("enter two operands");
    scanf("%f %f",&num1,&num2);
    switch(operator)
    {
        case '+': result=num1+num2;
        printf("%2f+%2f=%2f\n",num1,num2,result);
        break;
        case '-': result=num1-num2;
        printf("%2f-%2f=%2f\n",num1,num2,result);
        break;
        case '*': result=num1*num2;
        printf("%2f*%2f=%2f\n",num1,num2,result);
        break;
        case '/':
            if(num2==0)
```

```

{
    printf("error:division by zero\n");
}
else{
    printf("%2f/%2f=%2f\n",num1,num2,result);
}
break;
default:
printf("invalid operator");
}
return 0;
}

```

//Assume that you have an account balance of rs.100000. Ask the user says deposit ask amount to be deposited and print amount deposited and balance in the account. if user says withdraw ask amount to be withdraw and check whether amount is less than account balance if yes print amount withdrawn and balance, else print insufficient funds.

```

#include<stdio.h>
int main(void)
{
    int balance=100000,withdraw,deposit;
    operation=input("do you want to deposit or withdraw?(enter deposited or withdraw )")
    if(operation=="deposit")
    {
        float(input("enter the amount to deposit :"));
        balance+=deposit amount
        printf("amount deposited :%f",deposit amount);
        printf("new account balance :%f",balance);
    }
    else if{(operation=="with draw")}
    float(input("enter the amount to be withdraw:"))withdraw amount<=balance;
    {
        printf("withdrawn amount:%f",withdraw amount)
        printf("new account balance :2%f",balance);
    }
    else;
    {
        printf("insufficient=");
    }
    else;
}

```

```
    {  
        printf("invalid");  
    }  
}
```

```
//program to calculate simple interest  
#include<stdio.h>  
int main()  
{  
    float principal,rate,time,interest;  
    printf("enter principal,rate,and time");  
    scanf("%f %f %f",&principal,&rate,&time);  
    interest=(principal*rate*time)/100;  
    printf("simple interest=%.2f\n",interest);  
    return 0;  
}
```

```
//write a program to display the grade base on marks.  
#include<stdio.h>  
int main(){  
    int marks;  
    printf("enter your marks");  
    scanf("%d",&marks);  
    if(marks>=90){  
        printf("grade:A\n");  
    }  
    else if(marks>=75){  
        printf("grade:B\n");  
    }  
    else if(marks>=50){  
        printf("grade:C\n");  
    }  
    else{  
        printf("grade:F\n");  
    }  
    return 0;  
}
```