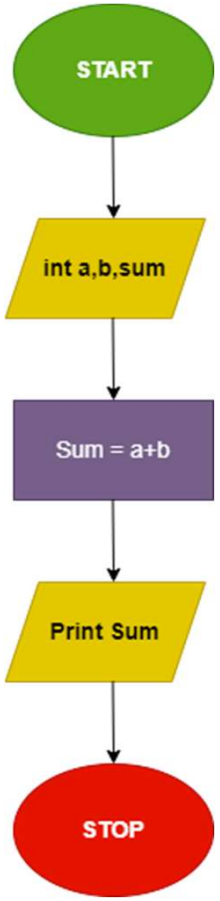
Program To find a sum of two number

```c
//program to find sum of two numbers
#include<stdio.h>
int main()
{
    int a,b,sum;
    //taking input from user
    printf("Enter no 1: ");
    scanf("%d",&a);
    printf("Enter no 2: ");
    scanf("%d",&b);
    //calculating sum
    sum=a+b;
    //printing sum
    printf("Sum = %d",sum);
    return 0;
}
```

Program To find a sum of two number

Algorithm

1. Start
2. Read a,b,sum
3. Sum=a+b
4. Display the result of sum
5. stop



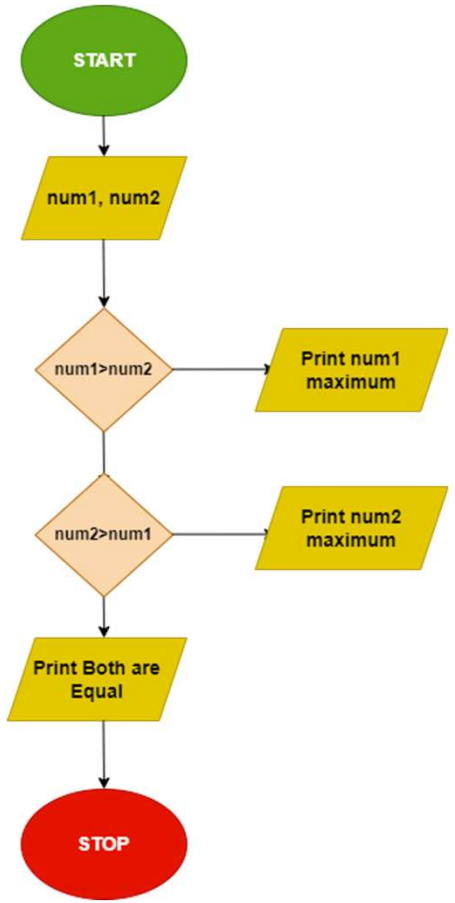
Program To find maximum between two numbers

```c
/*C program to find maximum between two numbers*/

#include <stdio.h>
int main()
{
    int num1, num2;
    /* Input two numbers from user */
    printf("Enter two numbers: ");
    scanf("%d%d", &num1, &num2);
    /* If num1 is maximum */
    if(num1 > num2)
    {
        printf("%d is maximum", num1);
    }
    /* If num2 is maximum */
    if(num2 > num1)
    {
        printf("%d is maximum", num2);
    }
    /* Additional condition check for equality */
    if(num1 == num2)
    {
        printf("Both are equal");
    }
    return 0;
}
```

Program To find maximum between two numbers

Algorithm

1. Start
2. Read num1 and num2
3. If num1>num2 print maximum is num1
4. If num2>num1 print maximum is num2
5. If step 3 & step 4 False then print both are equal
6. stop



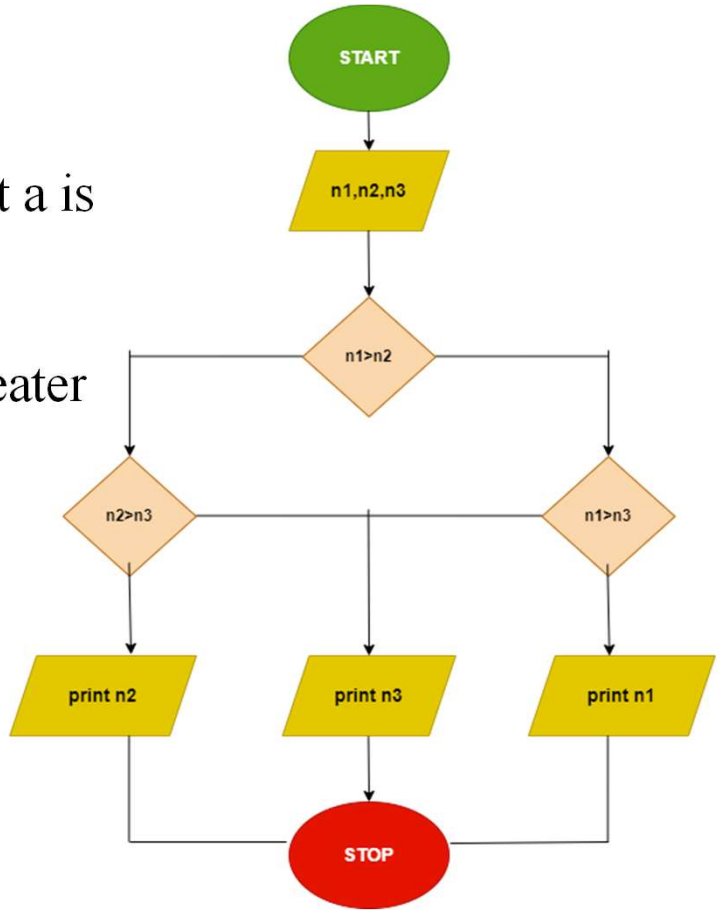
Program To find maximum between three number

```c
//program to find maximum between three numbers
#include <stdio.h>
int main()
{
    int num1, num2, num3, max;
    /* Input three numbers from user */
    printf("Enter three numbers: ");
    scanf("%d%d%d", &num1, &num2, &num3);
    if(num1 > num2)
    {
        if(num1 > num3)
        {
            /* If num1 > num2 and num1 > num3 */
            max = num1;
        }
        else
        {
            /* If num1 > num2 but num1 > num3 is not true */
            max = num3;
        }
    }
    else
    {
        if(num2 > num3)
        {
            /* If num1 is not > num2 and num2 > num3 */
            max = num2;
        }
        else
        {
            /* If num1 is not > num2 and num2 > num3 */
            max = num3;
        }
    }
    /* Print maximum value */
    printf("Maximum among all three numbers = %d", max);

    return 0;
}
```

Program To find maximum between three number

Algorithm

1. Start
2. Read a,b,c
3. If a>b and a>c then print a is greater Else Print C is greater
4. If b>c then print B is greater Else Print C is greater
5. Stop



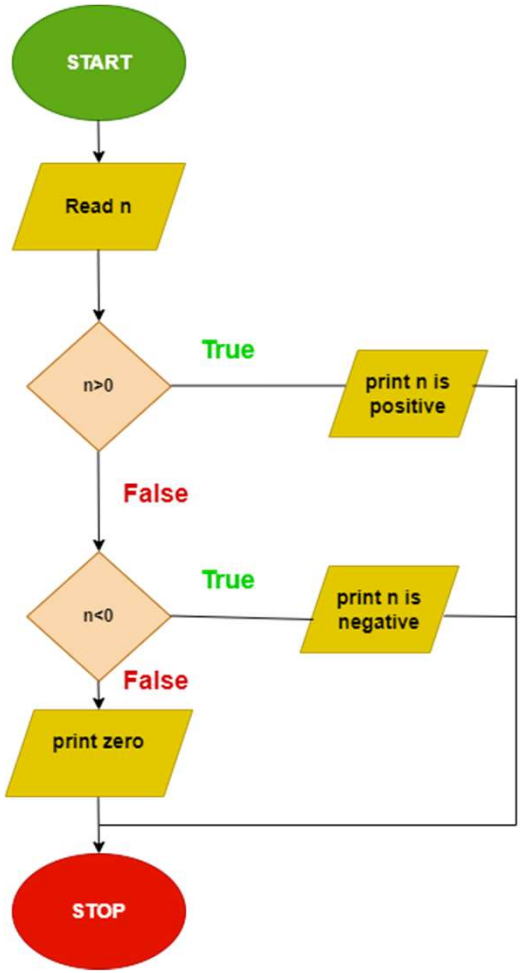
Program To check whether a number is positive, negative or zero

```c
//Program To Check whether a number is positive, negative or zero using if-else
#include <stdio.h>

int main()
{
    int n;
    /* Input number from user */
    printf("Enter any number: ");
    scanf("%d", &n);
    /* If number is positive */
    if(n > 0)
    {
        printf("Number is POSITIVE");
    }
    /* If number is negative */
    if(n < 0)
    {
        printf("Number is NEGATIVE");
    }
    /* If number is zero */
    if(n == 0)
    {
        printf("Number is ZERO");
    }

    return 0;
}
```

Program To check whether a number is positive, negative or zero

Algorithm

1. Start
2. Read n
3. If n>0 then print the number is positive
4. If n<0 print the number is negative
5. If above step 3 and step 4 false then print the number is zero
6. Stop



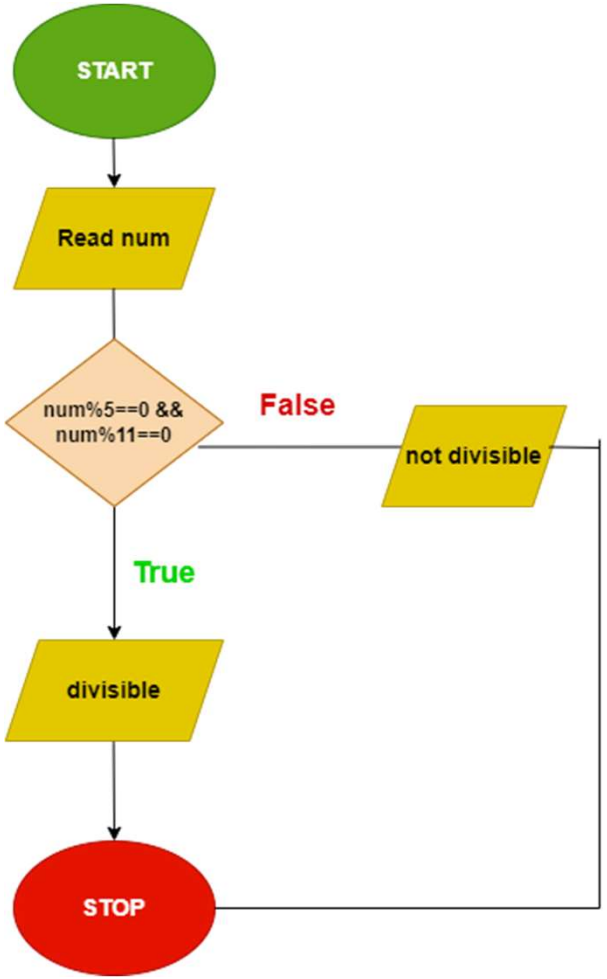
Program To check whether a number is divisible by 5 and 11 or not

```c
//Program To Check whether a number is divisible by 5 and 11 or not
#include <stdio.h>

int main()
{
    int num;
    /* Input number from user */
    printf("Enter any number: ");
    scanf("%d", &num);
    /*
     * If  num modulo division 5 is 0
     * and num modulo division 11 is 0 then
     * the number is divisible by 5 and 11 both
     */
    if((num % 5 == 0) && (num % 11 == 0))
    {
        printf("Number is divisible by 5 and 11");
    }
    else
    {
        printf("Number is not divisible by 5 and 11");
    }

    return 0;
}
```

Program To check whether a number is divisible by 5 and 11 or not

Algorithm

1. Start
2. Read n
3. Check the number is divisible by 5 and 11
4. Print or display result
5. Stop



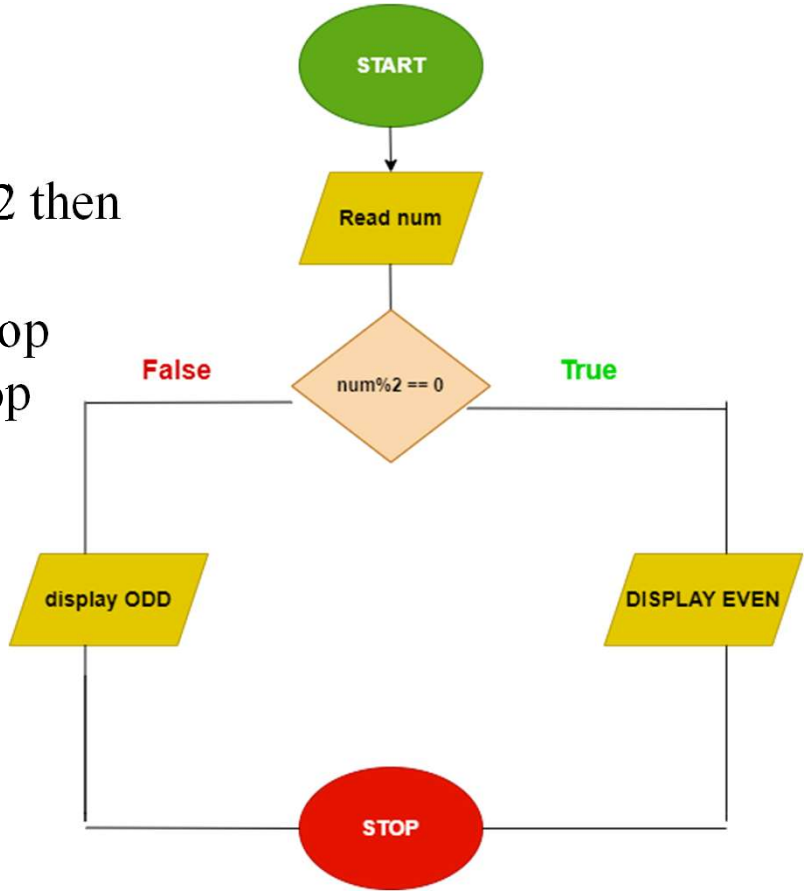
Program To check a whether a number is even or odd

```c
//Program To Check whether a number is even or odd using if-else
#include <stdio.h>

int main()
{
    int num;
    /* Input number from user */
    printf("Enter any number to check even or odd: ");
    scanf("%d", &num);
    /* Check if the number is divisible by 2 then it is even */
    if(num % 2 == 0)
    {
        /* num % 2 is 0 */
        printf("Number is Even.");
    }
    else
    {
        /* num % 2 is 1 */
        printf("Number is Odd.");
    }

    return 0;
}
```

Program To check a whether a number is even or odd

Algorithm

1. Start
2. Read num
3. If num is divisible by 2 then go to step 4 else stop
4. Display “Even” and stop
5. Display “Odd” and stop
6. Stop



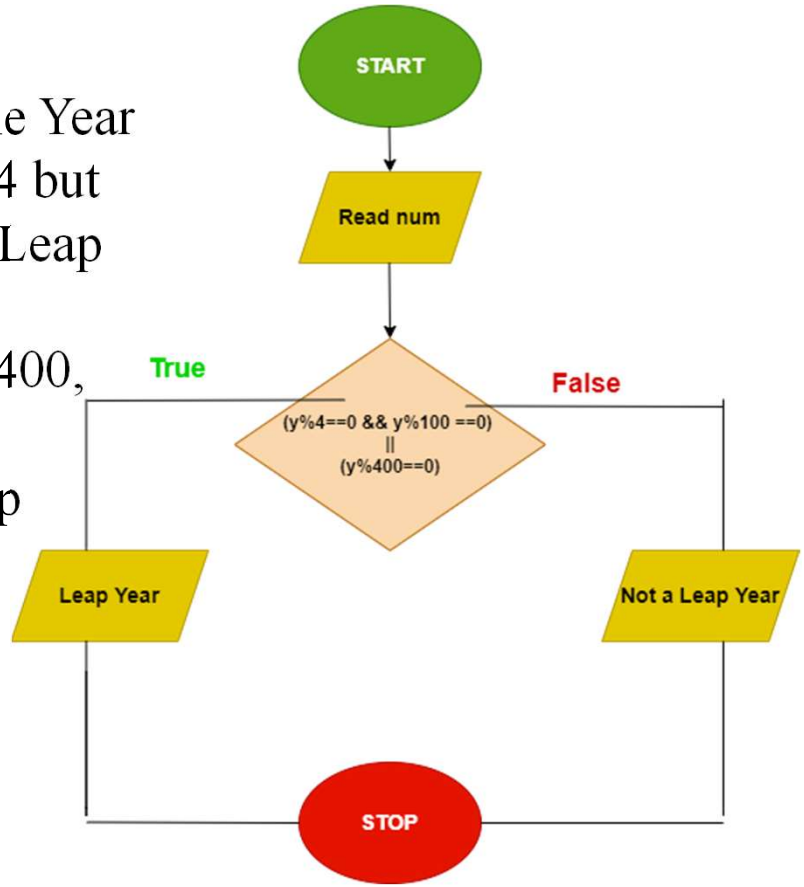
Program To check a leap year

```c
//program to check a year is leap year or not
#include <stdio.h>

int main()
{
    int year;
    /* Input year from user */
    printf("Enter year : ");
    scanf("%d", &year);
    /*
     * If year is exactly divisible by 4  and year is not divisible by 100
     * or year is exactly divisible by 400 then
     * the year is leap year.
     * Else year is normal year
     */
    if(((year % 4 == 0) && (year % 100 !=0)) || (year % 400==0))
    {
        printf("LEAP YEAR");
    }
    else
    {
        printf("COMMON YEAR");
    }
    return 0;
}
```

Program To check a leap year

Algorithm

1. Start
2. Read a Integer Variable Year
3. If year is divisible by 4 but not 100 then display “Leap Year”
4. If year is divisible by 400, Display “Leap Year”
5. Else display “Not Leap Year”
6. Stop



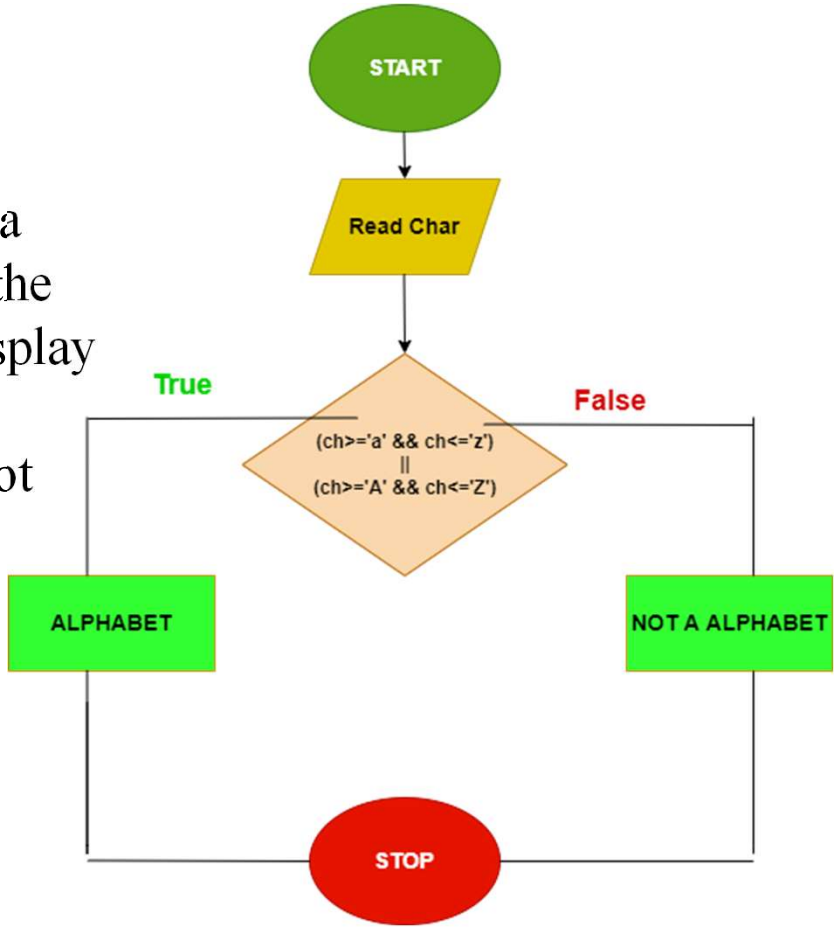
Program To check whether a character is alphabet or not

```c
//Program To check whether a character is alphabet or not
#include <stdio.h>

int main()
{
    char ch;
    /* Input a character from user */
    printf("Enter any character: ");
    scanf("%c", &ch);
    /* Check if the character is alphabet or not */
    if((ch >= 'a' && ch <= 'z') || (ch >= 'A' && ch <= 'Z'))
    {
        printf("Character is an ALPHABET.");
    }
    else
    {
        printf("Character is NOT ALPHABET.");
    }
    return 0;
}
```

Program To check whether a character is alphabet or not

Algorithm

1. Start
2. Read Character
3. If the ASCII Value of a character, is in under the (a-z) or (A-Z) then display "ALPHABET"
4. Otherwise display "Not ALPHABET"
5. Stop



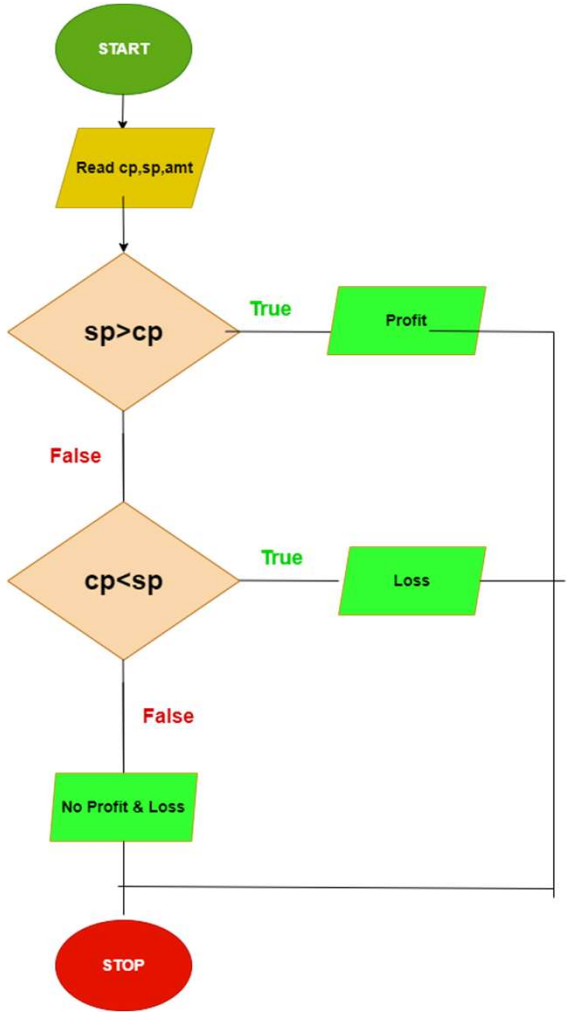
Program to calculate profit or loss

```c
//program to calculate the profit or loss of a company
#include <stdio.h>
int main()
{
    int cp,sp, amt; //cp=current price, sp=selling price, amt=amount
    /* Input cost price and selling price of a product */
    printf("Enter cost price: ");
    scanf("%d", &cp);
    printf("Enter selling price: ");
    scanf("%d", &sp);
    if(sp > cp)
    {
        /* Calculate Profit */
        amt = sp - cp;
        printf("Profit = %d", amt);
    }
    else if(cp > sp)
    {
        /* Calculate Loss */
        amt = cp - sp;
        printf("Loss = %d", amt);
    }
    else
    {
        /* Neither profit nor loss */
        printf("No Profit No Loss.");
    }

    return 0;
}
```

Program to calculate profit or loss

Algorithm

1. Start
2. Read cp, sp, am
3. If cp>sp print profit
4. If cp<sp print LOSS
5. If both sp==cp print No profit and no Loss
6. Store the result into a new variable
7. Display the value of that variable as a final result
8. Stop



Program To enter a student marks and find percentage and grade

```c
//program to enter a student marks and find the percentage and grade
#include <stdio.h>
int main()
{
    int phy, chem, bio, math, comp;
    float per;
    /* Input marks of five subjects from user */
    printf("Enter five subjects marks: ");
    scanf("%d%d%d%d%d", &phy, &chem, &bio, &math, &comp);
    /* Calculate percentage */
    per = (phy + chem + bio + math + comp) / 5.0;
    printf("Percentage = %.2f\n", per);
    /* Find grade according to the percentage */
    if(per >= 90)
    {
        printf("Grade A");
    }
    else if(per >= 80)
    {
        printf("Grade B");
    }
    else if(per >= 70)
    {
        printf("Grade C");
    }
    else if(per >= 60)
    {
        printf("Grade D");
    }
    else if(per >= 40)
    {
        printf("Grade E");
    }
    else
    {
        printf("Grade F");
    }

    return 0;
}
```

Program To enter a student marks and find percentage and grade

Algorithm

1. Start
2. Read the marks of 5 subject
3. Calculate the percentage
4. Check the condition
    1. P>=90%=A
    2. P>=80%||<90%=B
    3. P>=70%||<80%=C
    4. P>=60%||<70%=D
    5. P>=50%||<60%=E
    6. P>=40%||<50%=P
    7. P<40%=Fail
5. Stop

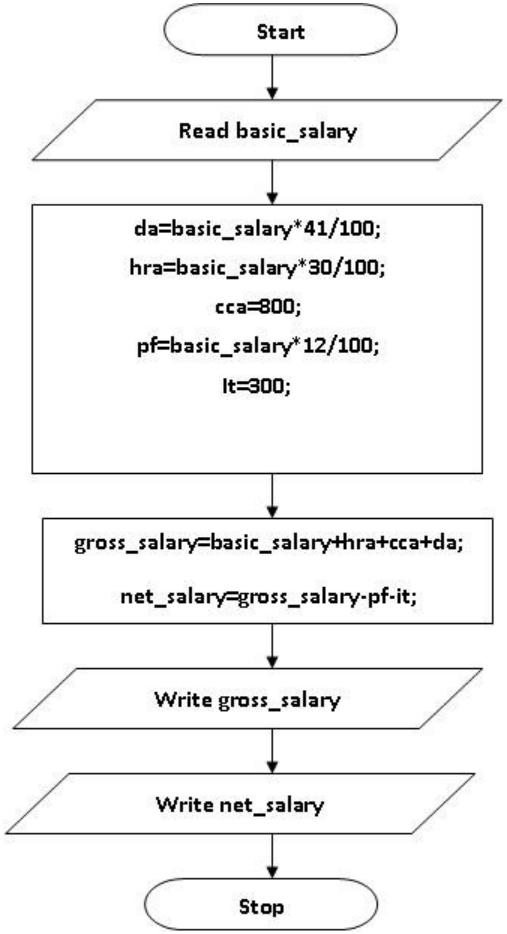
program to enter basic salary and calculate gross salary of an employee

```c
//program to enter basic salary and calculate gross salary of an employee
#include <stdio.h>

int main()
{
    float basic, gross, da, hra;
    /* Input basic salary of employee */
    printf("Enter basic salary of an employee: ");
    scanf("%f", &basic);
    /* Calculate D.A and H.R.A according to specified conditions */
    if(basic <= 10000)
    {
        da  = basic * 0.8;
        hra = basic * 0.2;
    }
    else if(basic <= 20000)
    {
        da  = basic * 0.9;
        hra = basic * 0.25;
    }
    else
    {
        da  = basic * 0.95;
        hra = basic * 0.3;
    }
    /* Calculate gross salary */
    gross = basic + hra + da;
    printf("GROSS SALARY OF EMPLOYEE = %.2f", gross);

    return 0;
}
```

program to enter basic salary and calculate gross salary of an employee

Algorithm

1. Start
2. Read basic, gross, da, hra
3. Check the condition
    1. If basic <=10000 then calculate da and hra accordingly , if not then go to step 4
4. If basic <=20000 Then calculate da and hra accordingly, if not then go to step 5
5. If basic >20000 then calculate da and hra accordingly
6. After finding hra and da calculate the gross = basic + hra + da
7. Display the gross
8. stop



program to enter basic salary and calculate gross salary of an employee

Algorithm

1. Input basic salary of employee. ...

1. If basic_salary <= 10000 then, hra = basic_salary * 0.8 and da = basic_salary * 0.2 .

2. Similarly check basic salary and compute hra and da accordingly.

1. Calculate final gross salary using formula gross_salary = basic_salary + da + hra .