PRACTICAL-2: Program To Implement Conditional Statements.

1. **Program that check whether the two no. entered by user are equal or not.**

```c
#include <stdio.h>
int main() {
   int a,b;
   printf("enter two no. :");
   scanf("%d%d",&a,&b);
   if(a==b)
   {
      printf("entered no. are equal");
   }
   else
   {
      printf("entered no. are not equal");
}
}
```

2. **Program to find the greatest among three numbers.**

```c
#include <stdio.h>
int main() {
   int a,b,c;
   printf("entered three no. :");
   scanf("%d%d%d",&a,&b,&c);
   if(a>b&&a>c)
   printf("a is the greatest among 3 no.:%d",a);
   else if(b>c && b>a)
   printf("b is the greatest among 3 no.:%d",b);
   else
   printf("c is the greatest among 3 no.:%d",c);
   }
```

3. Program to find given no. is even or odd.

```c
#include <stdio.h>
int main() {
    int a;
    printf("enter a no. :");
    scanf("%d",&a);
    if(a%2==0)
    {
        printf("no. is even");
    }
    else
    {
        printf("no. is odd");
    }
}
```

4. Program that tells whether a given year is leap or not.

```c
#include <stdio.h>
int main() {
    int a;
    printf("enter a year :");
    scanf("%d",&a);
    if((a%4==0) && ((a%400==0) || (a%100!=0)))
    {
        printf("entered year is leap year.");
    }
    else
    {
        printf("entered year is not leap year.");
    }
}
```

5. **The working hour based on age of the laborer is given:**

Age	working hour
0-10	0
11-15	0
16-20	3
20-25	6
>25	8

Write a program to calculate working hours of a person for a given age.

```c
#include <stdio.h>

int main() {
    int age;
    printf("enter age:");
    scanf("%d",&age);
    if(age>25)
    printf("total working hour or a person:8");
    if(age>21&&age<25)
    printf("total working hour or a person:6");
    if(age>16&&age<20)
    printf("total working hour or a person:3");
    if(age>11&&age<15)
    printf("total working hour or a person:0");
    if(age>=0&&age<10)
    printf("total working hour or a person:0");
getch();
    }
```

6.   Write the program to finds the roots of a quadratic equation.

```c
#include <stdio.h>
#include<math.h>
void main() {
   float a,b,c,x1,x2,d;
   printf("enterd the value of a,b,c:");
   scanf("%f%f%f",&a,&b,&c);
   d=b*b-4*a*c;
   if(d>0)
   {
      x1=-b+sqrt(d)/(2*a);
      x2=-b-sqrt(d)/(2*a);
      printf("the real roots:%f,%f",x1,x2);
   }
   else if(d==0)
   {
      x1=-b/(2*a);
      x2=-b/(2*a);
      printf("roots are equal:%f,%f",x1,x2);
   }
   else
   {
      printf("roots are imaginary.");
   }
getch();
   }
```

7. Write a program to print the given no. is even or odd using "Conditional operator".

```c
#include <stdio.h>
void main() {
    int n;
    printf("entered no. :");
    scanf("%d",&n);
    printf(n%2==0 ? "entered no. is even." : "entered no. is odd");
getch();
    }
```