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1.To check positive or negative
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```
#include <stdio.h>
int main() {
  int num;
  printf("enter a number:");
  scanf("%d",&num);
  if (num>0){
    printf(" %d is positive\n",num);
  }else if(num<0){
    printf("%d is negative\n",num);
  }else{
    printf("%d is zero\n",num);
  }
  return 0;
}</pre>
```

2.odd or even

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

3.leap year or not

```
#include <stdio.h>
int main() {
  int year;
  printf("enter the year:");
  scanf("%d",&year);

if((year%4==0&&year%100!=0)||year%400==0){
  printf("%d is leap year\n",year);
}else{
  printf("%d is not a leap year\n",year);
}
```

```
4.palindrome or not
#include<stdio.h>
int main(){
 int n,revnum=0,remnum,num;
 printf("Enter the number: ");
 scanf("%d",&n);
 num=n;
 while(n!=0){
  remnum=n%10;
  revnum=revnum*10+remnum;
  n/=10;
  if(num==remnum)
   printf("%d is palindrome",num);
   printf("%d is not palindrome",num);
  return 0;
 }
5.simple calculator
#include <stdio.h>
int main()
 int a,b;
 char oper;
 printf("Enter the number1: ");
 scanf("%d",&a);
 printf("Enter the number2: ");
 scanf("%d",&b);
 printf("Enter the operator");
 scanf("%s",&oper);
 if(oper=='+')
  printf("The sum is %d\n",a+b);
 else if(oper== '-'){
  printf("The difference is %d\n",a-b);
 }
 else if(oper== '*'){
  printf("The product is %d\n",a*b);
 }
 else if(oper== '/'){
  if(b!=0)
  {
   printf("The division is %d\n",a/b);
```

```
}
  else{
    printf("The division by zero is not possible.\n");
  }
 else
  printf("Invalid operator.\n");
}
}
5.using switch case calculator program
#include <stdio.h>
int main()
{
 int a,b;
 char oper;
 printf("Enter the number1:");
 scanf("%d",&a);
 printf("Enter the number2:");
 scanf("%d",&b);
 printf("Enter the operator");
 scanf(" %c",&oper);
 switch(oper)
  {
    case '+':
    printf("The sum is %d", a+b);
    break;
    case '-':
    printf("The subtract is %d", a-b);
    break;
    case '*':
    printf("The multiplication is %d", a*b);
    break;
    case '/':
     if(b!=0){
      printf("The division is %d",a/b);
     }
     else{
      printf("division is not possible by zero");
     break;
  }
```

}