```
//operatorDemo for bit-wise operators

#include<iostream>
using namespace std;

int main()
{
  unsigned int a = 5, b = 9;
  cout<<"\na = "<<a<<" b = "<<b;
  cout<<"\n a << 1 "<< (a << 1);
  cout<<"\n a >> 1 "<< (a >> 1);
  cout<<"\n a & b "<< (a & b);
  cout<<"\n a | b "<<(a | b);
  cout<<"\n a ^ b "<<(a ^ b);
  cout<<"\n ~a "<<(~a);
  return 0;
}



//Implicit_Explicit_Demo.cpp

#include<iostream>
using namespace std;
int main()
{
  char c1,c2;
  int i1,i2;
  float f1,f2;
  c1='H';
  i1=80.56;  /*float converted to int, only 80 assigned to i1  */
  f1=12.6;
  c2=i1;    /*int converted to char */
  i2=f1;    /*float converted to int */
  /*Now c2 has the character with ASCII value 80, i2 is assigned value 12 */
  cout<<"\n c2 = "<<int(c2) << " i2 = "<<i2;     //c2 = 80   i2 = 80
  f2=i1;                         /*int converted to float*/
  i2=c1;                         /*char converted to int */
  /*Now i2 contains ASCII value of character 'H' which is 72*/
  cout<<"\n f2 = "<<f2<<"  i2 = "<<i2;      //f2 = 80   i2 = 72


  int x=5,y=2;
  float p,q;
  p=x/y;
  cout<<"\n p = "<<p;          //2
  q=(float)x/y;
  cout<<" q = "<<q;           //2.5
  return 0;
}
```

For typecasting - From ebook C++ Primer Pg no 108 Listing 3.14 typecast.cpp

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Try these expressions -

```
  int a,b,c,d,e,f,g,h,k;
  a=8, b=4, c=2, d=1, e=5, f=20;
   cout<<"exp1 :" << (a+b-(c+d)*3%e+f/9);
  a=17, b=5, c=6, d=3, e=5;
   cout<<"exp2 :" <<(a%6-b/2+(c*d-5)/e);
  a=4, b=5, c=6, d=3, e=5, f=10;
   cout<<"exp3 :" <<(a*b-c/d<e+f);
  a=8, b=5, c=8, d=3, e=65, f=10, g=2, h=5, k=2;
   cout<<"exp4 :" <<(a-b+c/d==e/f-g+h%k);
  a=8, b=3, c=2, d=3, e=2, f=11;
   cout<<"exp5 :"<<(a-b||(a-b*c)+d&&e-f%3);
```