My roll number is 2019101116 .
1.int x=2019101116%100;
threfore x=16 ie 00000000000000000000000000001000 in 32 bit int takes 4bytes ie 32 bits.
2.int a= - 1 * (x);
-1=11111111111111111111111111111111 (by 2s complement as 1=0000....1)
x=00000000000000000000000000001000
-1*x gives 11111111111111111111111111110000 this is 36 bits but int takes only 32 bytes.
a=11111111111111111111111111110000 ie it is -16 (by 2s complement).
3.unsigned int b=(unsigned int a);
this is explicit declaration for signed a into unsigned;
by binary notation b=2^32-2^4=4294967296-16=4294967280.
4.unsigned int c=UINT_MAX-x;
UINT_MAX= 4294967295
x=16
c= 4294967279
5.int d=(int) c;
this shows explicit declaration for unsigned int c
c=11111111111111111111111111011111(ie 4294967279)
by signed c=-17
ie d=-17
6.int p=65490+x;
65490+x=2^16-46+16
p=2^16-30
7.short int e=signed int p;
e=2^16-30 as in e we can take 2^16 as 0 in 16 bit consideration as 2^16 is 17 bit so e= -30
8.unsigned short f=unsigned short a;
f=2^16-2^4=65520

OUTPUT : -16 4294967280 4294967279 -17 -30 65520