

output of the code snippet:

-55 4294967241 4294967240 -56 9 65481

explanation:

my rollno is 2019101055

int x = yourrollnumber%100;
(so here x is 2019101055%100=55)

int a = (int)x;
(a=-x=>a=-55)

unsigned int b = (unsigned int) a ;
(signed to unsigned we add 2^{32})
(so here b is 4294967241)

unsigned int c = UINT_MAX - x ;
(UINT_MAX: $2^{32}-1=4294967295$. (this is for a 32 bit compiler))
so $4294967295-55=4294967240$ which is stored in c)

int d = (int) c ;
(integer form of c is the unsigned form=> unsigned to signed so subtract 2^{32} .
=>d=-56)

int p = 65490 + x ;
(p=65490+55=65545)

short int e = (short int) p ;
(int to short int subtract 2^{16} so p=9(65545-65536))

unsigned short f = (unsigned short) a ;
(for signed to unsigned add 2^{16} .so a=65536-55=65481)

printf("%d %u %u %d %h i %hu\n",a,b,c,d,e,f) ;
output given above.