```
ap_uint<13> r1, r2, r3;
ap_uint<7> v1 = 0x41;

r1 = v1 << 6;
r2 = ap_uint<13>(v1) << 6;
ap_int<7> v2 = -63;
r3 = v2 >> 4;

std::cout << " v1 = " << v1.to_string() << std::endl;
std::cout << " r1 = " << r1.to_string() << std::endl;
std::cout << " r2 = " << r2.to_string() << std::endl;
std::cout << " v2 = " << v2.to_string() << std::endl;
std::cout << " r3 = " << r3.to_string() << std::endl;
```

The output of above code is