

Name : Gaurav Amarnani.  
Roll No. 02.  
Class : D12A.

**CODE:**

```
import random
k=random.getrandbits(128)
m=random.getrandbits(128)
kb=bin(k)[6:]
mb=bin(m)[4:]
kbl=kb[0:64]
kbr=kb[64:]
mbl=mb[0:64]
mbr=mb[64:]
a1=int(kbl,2)
int(mbr,2)
a2=int(kbr,2)
int(mbl,2)
a3=a1^a2
a4=bin(a3)[2:].zfill(64)
a5=a4[0:32]
a6=a4[32:]
a7=int(a5,2)
int(a6,2)
print("128 Bit Key = ",kb)
print("128 Random Bits Generated = ",mb)
print("RES/SRES =",bin(a7)[2:].zfill(len(a5)))
```

**OUTPUT:**

```
128 Bit Key =  1010010000100100100011100000100011100010111000110010110011001
              000101011001101111110011011110010100000001000010101110010010110
128 Random Bits Generated =
              00001010001111011011000010000000011011011101010001111110000010010011001
              11010101001010110001011101000100101111100000011011000
RES/SRES = 10101110111010010111011110110100
> |
```

