```c
#include <stdio.h>
#include <stdlib.h>
int main(){
  puts("Condition: Matrix*flag=v5");
  puts("Please input the flag");
char flag[6];
int b[6] ={661,541,436,322,206,109};
int i=0,j=0;
int Matrix[6][6]
={
1,1,1,1,1,1,
1,1,1,1,1,0,
1,1,1,1,0,0,
1,1,1,0,0,0,
1,1,0,0,0,0,
1,0,0,0,0,0,
};
for(i=0;i<6;i++){
 for(j=0;j<6;j++)
  printf("%d ",Matrix[i][j]);
 printf("\n");
}

  scanf("%s",flag);
int count,date=0;
for(i=0;i<6;i++){
  count = 0 ;
  for(j=0;j<6;j++)
   count += Matrix[i][j]*flag[j];
  if(b[i] == count)
   continue;
  else
  {
    date=1;
  }
}
if(date==0)
  printf("you know matrix,flag is jnctf{%s}\n",flag);
else
  printf("error!\n");
system("pause");
}
```

涉及到矩阵的乘法，矩阵的求逆。

IDA打开

找到数组v5

```
v5 = 661;
v6 = 541;
v7 = 436;
v8 = 322;
v9 = 206;
v10 = 109;
```

```
for ( i = 0; i <= 5; ++i )
{
  v18 = 0;
  for ( j = 0; j <= 5; ++j )
    v18 += Dst[j + 6i64 * i] * *(&v11 + j);
  if ( v18 != *(&v5 + i) )
    v17 = 1;
}
if ( v17 )
  puts("error!");
else
  puts("you know matrix");
```

根据代码逻辑 需要v17 = 0

v17 = 0 需要 v18 = v5

矩阵第i行 * v11数组 = v5[i] 即为矩阵运算规则

即矩阵*向量v11 = 向量v5

知道向量V5 回推 V11 需求的矩阵的逆矩阵

然后逆矩阵 * v5 = v11

flag形式可以为

jnctf{****}; 括号内为求得的向量的字符形式

即

jnctf{matrix};