

HASH Function:

1. convert the 3 char's to their 3 ASCII codes
(giving 3 int's, all between 65 to 90, inclusive)

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90

2. multiply those 3 numbers together
(giving a number between $65*65*65=274,625$ through $90*90*90=729,000$)
3. use the famous "division-remainder" algorithm to get homeAddress
(i.e., use the remainder (the % operator) from dividing step #2 result by MAX_N_HOME_LOC)
(giving a number between 0 and MAX_N_HOME_LOC – 1, inclusive)
4. return that as the homeAddress

Country Code	DRP (ID)	3 ASCII codes	Multiplied together	Home Address
MEX	12			
CHN	3			
JPN	9			
USA	6			
FRA	19			
BEL	27			
GBR	17			
HTI	30			
VEN	22			
NIC	31			
POL	20			
YEM	24			
EGY	15			
LBN	32			
IND	4			
OMN	33			
DEU	13			
SOM	28			
WSM	36			
KEN	21			
XVI	1			
QAT	35			
ZWE	25			
RUS	8			
TCA	37			
ATA	39			

This structure is NOT in memory – it's just a worksheet to determine HOME ADDRESS (based on HashFunction)