#include<stdio.h>

void main()

{

int num,sum,org,rem=0;

printf("enter your number");

scanf("%d",&num);

org=num;

while(sum!=1&&sum!=4)

{

sum=0;

while(num!=0)

{

rem=num%10;

sum=sum+rem\*rem;

num=num/10;

}

num=sum;

}

if(sum==1)

{

printf("happy %d ",org);

}

else

{

printf("not happy %d ",org);

}

}

Output:

enter your number13

happy 13