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#include <stdio.h>

int growth\_population(int, int);

void analysis(int);

int main(){

int in\_rabbit, month, rab\_controller, num\_rabit;

do{

rab\_controller=0;

printf("Enter initial number of rabbits: ");

scanf("%d",&in\_rabbit);

if(in\_rabbit==0){

rab\_controller=1;

printf("Sorry you cannot enter 0!\n");

}

}while(rab\_controller==1);

printf("Number of months: ");

scanf("%d",&month);

num\_rabit= growth\_population(month, in\_rabbit);

printf("At the end of month %d, rabbit population will be %d\n", month, num\_rabit);

analysis(num\_rabit);

return 0;

}

int growth\_population(int m, int initial\_rabbits){

if (m==0)

return initial\_rabbits;

else

return (1.25\*growth\_population(m-1, initial\_rabbits));

}

void analysis(int rabbits){

if (rabbits < 100)

printf("Your farm will be a hobby farm!");

else if (rabbits <=200)

printf("Your farm will be a small farm!");

else if (rabbits <=500)

printf("Your farm will be a medium farm!");

else if (rabbits <=1000)

printf("Your farm will be a big farm!");

else

printf("Your farm will be a huge farm!");

}