a.

i.

#include <stdio.h>

void year();

void main()

{

printf("Check the Year");

checkYear();

}

void checkYear()

{

int year;

printf("Enter a year: ");

scanf("%d", &year);

if (year % 400 == 0)

{

printf("%d is a leap year.", year);

}

else if (year % 100 == 0)

{

printf("%d is not a leap year.", year);

}

else if (year % 4 == 0) {

printf("%d is a leap year.", year);

}

else {

printf("%d is not a leap year.", year);

}

}

ii.

#include <stdio.h>

void f();

void main()

{

convertNum();

}

void convertNum()

{

long int bv, hv = 0, i = 1, rem;

printf("Enter the binary number: ");

scanf("%ld", &bv);

while (bv != 0)

{

rem = bv % 10;

hv = hv + rem \* i;

i = i \* 2;

bv = bv / 10;

}

printf("Equivalent hexadecimal value: %lX", hv);

}

iii.

#include <stdio.h>

void num();

void main()

{

cont();

}

void cont()

{

long long n;

int count = 0;

printf("Enter an integer: ");

scanf("%lld", &n);

while (n != 0)

{

n /= 10;

++count;

}

printf("Number of digits: %d", count);

}