#include <stdio.h>

int main()

{

int c;

printf("%d",c=20.0/200\*200);

}

#include <stdio.h>

int main()

{

int c;

printf("%d",c=(float)20/200\*200);

}

## Implicit type conversion

#include <stdio.h>

#include <math.h>

int main()

{

int x=10;

char y='a';

x=x+y;

float z=x+1.0;

printf("x=%dz=%f",x,z);

## Control statements

int main()

{

int a=14;

if (a%2==0)

printf("even num");

else

printf("odd num");

}

#include <stdio.h>

#include <math.h>

int main()

{

int a;

scanf("%d",&a);

if (a>0)

printf("positive num");

else

printf("negative num");

}

#include <stdio.h>

#include <math.h>

int main()

{

int a;

scanf("%d",&a);

if (a>0)

printf("positive num");

else if (a<0)

printf("negative num");

else

printf("zero");

}

#include <stdio.h>

#include <math.h>

int main()

{

char ch;

scanf("%c",&ch);

if (ch>='A' && ch<='Z')

printf("uppercase alphabet");

else if (ch>='a' && ch<='z')

printf("lowercase digit");

else if (ch>=48 && ch<=57)

printf("number");

else

printf("invalid");

}

### Switch condition

#include <stdio.h>

#include <math.h>

int

main ()

{

int n;

scanf ("%d", &n);

switch (n)

{

case 1:

printf ("Sunday");

break;

case 2:

printf ("monday");

break;

case 3:

printf ("tuesday");

break;

case 4:

printf ("wednesday");

break;

case 5:

printf ("thursday");

break;

case 6:

printf ("friday");

break;

case 7:

printf ("Saturday");

break;

default:

printf ("invalid");

}

}

#include <stdio.h>

#include <math.h>

int main ()

{

int a,b,ch;

scanf ("%d%d", &a,&b);

scanf (" %d",&ch);

switch (ch)

{

case 1:

printf ("%d",a+b);

break;

case 2:

printf ("%d",a-b);

break;

case 3:

printf ("%d",a\*b);

break;

case 4:

printf ("%d",a/b);

break;

case 5:

printf ("%d",a%b);

break;

default:

printf ("invalid ");

}

}

#include <stdio.h>

#include <math.h>

int main ()

{

int a,b;

char ch;

scanf ("%d%d", &a,&b);

scanf (" %c",&ch);

switch (ch)

{

case '+':

printf ("%d",a+b);

break;

case '-':

printf ("%d",a-b);

break;

case '\*':

printf ("%d",a\*b);

break;

case '/':

printf ("%d",a/b);

break;

case '%':

printf ("%d",a%b);

break;

default:

printf ("invalid ");

}

}

## While loops

#include <stdio.h>

#include <math.h>

int

main ()

{

int a = 1;

while (a < 10)

{

printf ("%d", a);

a++;

}

}

#include <stdio.h>

#include <math.h>

int

main ()

{

int a = 0;

while (a<=10)

{

printf ("%d", a);

a+=2;

}

}

#include <stdio.h>

#include <math.h>

int

main ()

{

int a,i;

i=0;

scanf("%d",&a);

while (i<=a)

{

printf ("%d", i);

i+=2;

}

}

#include <stdio.h>

#include <math.h>

int

main ()

{

int a;

a=1;

do

{

printf("%d",a);

a++ ;

}

while(a<=10);

}

## For loops

#include <stdio.h>

#include <math.h>

int

main ()

{

int a;

a=1;

for(a;a<20;a++)

printf(" %d",a);

}

#include <stdio.h>

#include <math.h>

int

main ()

{

int a;

a=1;

for(a;a<=20;a+=2)

printf(" %d",a);

}

//write a program to print the sum of the digits of a number

#include <stdio.h>

#include <math.h>

int

main ()

{

int n,r,s=0;

scanf("%d",&n);

while(n!=0)

{

r=n%10;

s=s+r;

n=n/10;

}

printf("%d",s);

}

//write a program to print the reverse of a number

#include <stdio.h>

#include <math.h>

int

main ()

{

int n,r,s=0;

scanf("%d",&n);

while(n!=0)

{

r=n%10;

s=s\*10+r;

n=n/10;

}

printf("%d",s);

}

//write a program to print the sum of first and last digits of a number

#include <stdio.h>

#include <math.h>

int

main ()

{

int n,r,s=0,t;

scanf("%d",&n);

t=n%10;

while(n!=0)

{

r=n%10;

n=n/10;

}

printf("%d",r+t);

}

//write a program to print the sum of the odd digits of a number

#include <stdio.h>

#include <math.h>

int

main ()

{

int n,r,s=0;

scanf("%d",&n);

while(n!=0)

{

r=n%10;

if(r%2==1)

s=s+r;

n=n/10;

}

printf("%d",s);

}

//write a program to print the sum of the odd index digits of a number from right

#include <stdio.h>

#include <math.h>

int

main ()

{

int n,r,s=0,t=0;

scanf("%d",&n);

while(n!=0)

{

t++;

r=n%10;

if(t%2==1)

s=s+r;

n=n/10;

}

printf("%d",s);

}

//write a program to print the number of digits in a number

#include <stdio.h>

#include <math.h>

int

main ()

{

int n,r,s=0,t=0;

scanf("%d",&n);

while(n!=0)

{

t++;

n=n/10;

}

printf("%d",t);

}