

1. WAP TO PRINT HELLO WORLD

```
#include <stdio.h>
```

```
#include <stdlib.h>
```

```
int main()
```

```
{
```

```
    printf("Hello world!\n");
```

```
    return 0;
```

```
}
```

2. WAP TO ENTER AN INTEGER FROM USER

```
#include <stdio.h>
```

```
#include <stdlib.h>
```

```
int main()
```

```
{
```

```
    int a;
```

```
    printf("enter a no\n");
```

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

```
    printf("no is= %d", a);
```

```
    return 0;
```

```
}
```

3. WAP TO ADD TWO NO

```
#include <stdio.h>
```

```
#include <stdlib.h>
```

```
int main()
```

```
{
```

```
    int a,b;
```

```
    printf("enter two no\n");
```

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

```
    printf("sum is= %d", a+b);
```

```
    return 0;|
```

```
}
```

4. WAP TO MULTIPLY FLOATING NO

```
#include <stdio.h>

#include <stdlib.h>

int main()
{
    float a,b;

    printf("enter two no\n");

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

    printf("product is= %f", a*b);

    return 0;
}
```

5. WAP TO FIND ASCII VALUE OF A CHARACTER

```
#include <stdio.h>
```

```
#include <stdlib.h>
```

```
int main()
```

```
{
```

```
    char a;
```

```
    printf("enter a char \n");
```

```
    scanf("%c", &a);
```

```
    printf("ascii value of %c is %d", a,a);
```

```
    return 0;
```

```
}
```

6. WAP TO FIND REMAINDER AND QUOTIENT

```
#include <stdio.h>
```

```
#include <stdlib.h>
```

```
int main()
```

```
{
```

```
    int r,q,d1,d2;
```

```
    printf("enter divisor  and dividant \n");
```

```
    scanf("%d %d", &d1, &d2);
```

```
    q= d2/d1;
```

```
    r=d2%d1;
```

```
    printf("quotient and remainder are %d %d", q,r);
```

```
    return 0;
```

```
}
```

7. WAP TO FIND SIZE OF INT FLOAT DOUBLE AND CHAR

```
#include <stdio.h>
```

```
#include <stdlib.h>
```

```
int main()
```

```
{
```

```
    int a;
```

```
    char b;
```

```
    float c;
```

```
    double d;
```

```
    printf("int size: %d bytes \n", sizeof(a) );
```

```
    printf("char size: %d bytes \n", sizeof(b) );
```

```
    printf("float size: %d bytes \n", sizeof(c) );
```

```
    printf("double size: %d bytes \n", sizeof(d) );
```

```
    return 0;
```

```
}
```

8. WAP TO SWAP TWO NOS USING THIRD VARIABLE

```
#include <stdio.h>
```

```
#include <stdlib.h>
```

```
int main()
```

```
{
```

```
    int a,b,temp;
```

```
    printf("enter two no \n");
```

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

```
    printf("values before swapping: %d %d \n", a,b);
```

```
    temp=a;
```

```
    a=b;
```

```
    b=temp;
```

```
    printf("values after swapping: %d %d \n", a,b);
```

```
    return 0;
```

```
}
```


9. WAP TO SWAP TWO NO WITHOUT A THIRD VARIABLE

```
#include <stdio.h>
```

```
#include <stdlib.h>
```

```
int main()
```

```
{
```

```
    int a,b;
```

```
    printf("enter two no \n");
```

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

```
    printf("values before swapping: %d %d \n", a,b);
```

```
    a=a+b;
```

```
    b=a-b;
```

```
    a=a-b;
```

```
    printf("values after swapping: %d %d \n", a,b);
```

```
    return 0;
```

```
}
```

10. CHECK NO- EVEN/ODD

```
#include <stdio.h>
```

```
#include <stdlib.h>
```

```
int main()
```

```
{
```

```
    int a;
```

```
    printf("enter no \n");
```

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

```
    if(a%2==0)
```

```
        printf("%d is even", a);
```

```
    else
```

```
        printf("%d is odd", a);
```

```
    return 0;
```

```
}
```

11. WAP TO CHECK A NO IS CONSONANT OR VOWEL

```
#include <stdio.h>
```

```
#include <stdlib.h>
```

```
int main()
```

```
{
```

```
    char a;
```

```
    printf("enter char \n");
```

```
    scanf("%c", &a);
```

```
    if(a=='a' || a=='e' || a=='i' || a=='o' || a=='u')
```

```
        printf("%c is a vowel", a);
```

```
    else
```

```
        printf("%c is a consonant", a);
```

```
    return 0;
```

```
}
```

12. WAP TO FIND THE LARGEST AMONG THREE NO

```
#include <stdio.h>

#include <stdlib.h>

int main()
{
    int a,b,c;

    printf("enter three nos \n");

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

    if(a>b && a>c)

        printf("%a is greatest", a);

    else if(b>a && b>c)

        printf("%d is greatest", b);

    else

        printf("%d is greatest", c);

    return 0;
}
```

14. WAP TO CHECK LEAP YEAR

```
#include <stdio.h>

#include <stdlib.h>

int main()

{int a;

    printf("enter a year \n");

    scanf("%d", &a);

    if(a%100==0)

    { if(a%400==0)

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

        else

            printf("not a leap year");  }

    else if( a%4==0)

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

    else

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

    return 0; }
```

15. WAP TO CHECK WHETHER NO IS POSITIVE OR NEGATIVE.

```
#include <stdio.h>

#include <stdlib.h>

int main()
{
    int a;

    printf("enter a no \n");

    scanf("%d", &a);

    if(a>0)

        printf("%d is positive",a);

    else if(a<0)

        printf("%d is negative",a);

    else

        printf(" you entered zero");

    return 0;

}
```

16. TO CHECK WHETHER THE GIVEN CHARACTER IS ALPHABET OR NOT

```
#include <stdio.h>

#include <stdlib.h>

int main()
{
    char b;

    printf("enter char \n");

    scanf("%c", &b);

    if(b>='a' && b<='z')

        printf("%c is an alphabet",b);

    else

        printf("not an alphabet");

    return 0;
}
```

17. CALCULATE THE SUM OF NATURAL NOS

```
#include <stdio.h>

#include <stdlib.h>

int main()

{

    int i,n,sum;

    sum=0;

    printf("enter no \n");

    scanf("%d", &n);

    for(i=0;i<=n;i++)

        sum=sum+i;

    }

    printf("sum is %d", sum);

    return 0;

}
```


18. FACTORIAL OF A NO

```
#include <stdio.h>

#include <stdlib.h>

int main()

{

    int i,n,fact;

    fact=1;

    printf("enter no \n");

    scanf("%d", &n);

    for(i=1;i<=n;i++)

    {

        fact=fact*i;

    }

    printf("fact is %d", fact);

    return 0;

}
```

19. GENERATE MULTIPLICATION TABLE

```
#include <stdio.h>
```

```
#include <stdlib.h>
```

```
int main()
```

```
{
```

```
    int i,n;
```

```
    printf("enter no \n");
```

```
    scanf("%d", &n);
```

```
    for(i=1;i<=10;i++)
```

```
    {
```

```
        printf("%d * %d = %d \n", n,i,(n*i));
```

```
    }
```

```
    return 0;
```

```
}
```

The image shows a C program being executed. On the left is a code editor window titled 'main.c' with the following code:

```
1  #include <stdio.h>
2  #include <stdlib.h>
3
4  int main()
5  { int varchar;
6    varchar = '3';
7    printf("%c",varchar);
8    return 0;
9  }
10
```

On the right is a command prompt window titled 'H:\hhhh\main.exe'. It displays the output of the program:

```
3
Process returned 0 (0x0)   execution time
Press any key to continue.
```

The command prompt window has a black background and white text. The output shows the character '3' followed by a newline, then the process return information, and finally a prompt to press any key to continue.

Start here X main.c X

1#include <stdio.h>
2#include <stdlib.h>
3
4int main()
5{
6/* int varchar;
7varchar = '3';
8printf("%c",varchar);*/
9int a,b;
10a=-3- -3;
11b=-3- -(-3);
12printf(" %d \n %d",a,b);
13return 0;
14}

H:\h\h\h\main.exe

0
-6
Process returned 0 (0x0) execution
Press any key to continue.

Start here Xmain.c X

```
1  #include <stdio.h>
2  #include <stdlib.h>
3  int main()
4  {
5      int i,n1,n2,lcm;
6      printf("enter two no \n");
7      scanf("%d \n %d", &n1,&n2);
8      for(i=1; i<=n1*n2 ; ++i )
9      { if(i%n1==0 && i%n2==0)
10         {
11             lcm=i;
12             break;
13         }
14     }
15     printf("lcm is %d ", lcm);
16     return 0;
17 }
18
```

H:\hhhh\main.exe

enter two no
72
120
lcm is 360
Process returned 0 (0x0) execution time : 69.360 s
Press any key to continue.

Logs & others

```
1  #include <stdio.h>
2  #include <stdlib.h>
3  int main()
4  {
5      int i;
6      /* printf("enter two no")
7      scanf("%d \n %d", &n1,
8
9      for(i=65; i<=90; ++i )
10     {
11         printf("%c", i);
12     }
13     return 0;
14 }
15
```

H:\hhhh\main.exe

ABCDEFGHIJKLMNOPQRSTUVWXYZ
Process returned 0 (0x0) execution time
Press any key to continue.

Start here X main.c X

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21

```
#include <stdio.h>
#include <stdlib.h>
int main()
{
    int i;
    /* printf("enter two no
    scanf("%d \n %d", &n1,&

    for(i=65; i<=90; ++i )
    {
        printf("%c", i);
    }
    printf("\n");
    for(i=97; i<=122; ++i )
    {
        printf("%c", i);
    }
    return 0;
}
```

H:\hhhh\main.exe

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
Process returned 0 (0x0) execution time : 0.109 s
Press any key to continue.

```
main() : int
main.c
#include <stdio.h>
#include <stdlib.h>
int main()
{
    int n,temp=0,m,r;
    printf("enter no \n");
    scanf("%d", &n);
    m=n;
    r=0;
    while(n!=0)
    {
        temp=n%10;
        r=r*10+temp;
        n=n/10;
    }
    printf(" the reverse of %d is %d", m,r);
    return 0;
}
```

```
H:\hhhh\main.exe
enter no
12345
the reverse of 12345 is 54321
Process returned 0 (0x0)   execution time : 5.078
Press any key to continue.
```


Start here

main.c

```
1  #include <stdio.h>
2  #include <stdlib.h>
3  int main()
4  {
5      int n1,n2,n3,avg=0;
6      printf("enter three nos\n");
7      scanf("%d \n %d \n %d", &n1,&n2,&n3);
8      avg=(n1+n2+n3)/3;
9      printf("avg of %d,%d and %d is %d ", n1,n2,n3,avg);
10     return 0;
11
12
```

H:\hhhh\main.exe

```
enter three nos
10
15
5
avg of 10,15 and 5 is 10
Process returned 0 (0x0)   execution time : 7.063
Press any key to continue.
```

```

1  #include <stdio.h>
2  #include <stdlib.h>
3  int main()
4  {
5      int n,i,l,sum,f;
6      sum=0;
7      printf("enter no \n");
8      scanf("%d",&n);
9      for(i=1;i<n;++i)
10     {if(n%i==0)
11         sum=sum + i;
12     }
13     if(n==sum)
14         printf("%d is perfect no",n);
15     else
16         printf("%d is not perfect no",n);
17
18     return 0;
19 }
20

```

```

enter no
28
28 is perfect no
Process returned 0 (0x0)   execution
Press any key to continue.

```

Start here X

main.c X

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

```
#include <stdio.h>
#include <stdlib.h>
int main()
{
    int i, sum;
    sum=0;

    for(i=1;i<=30;++i)
    {if(i%2==0)
        sum=sum + i;
    }
    printf("sum is %d", sum);
    return 0;
}
```

H:\hhhh\main.exe

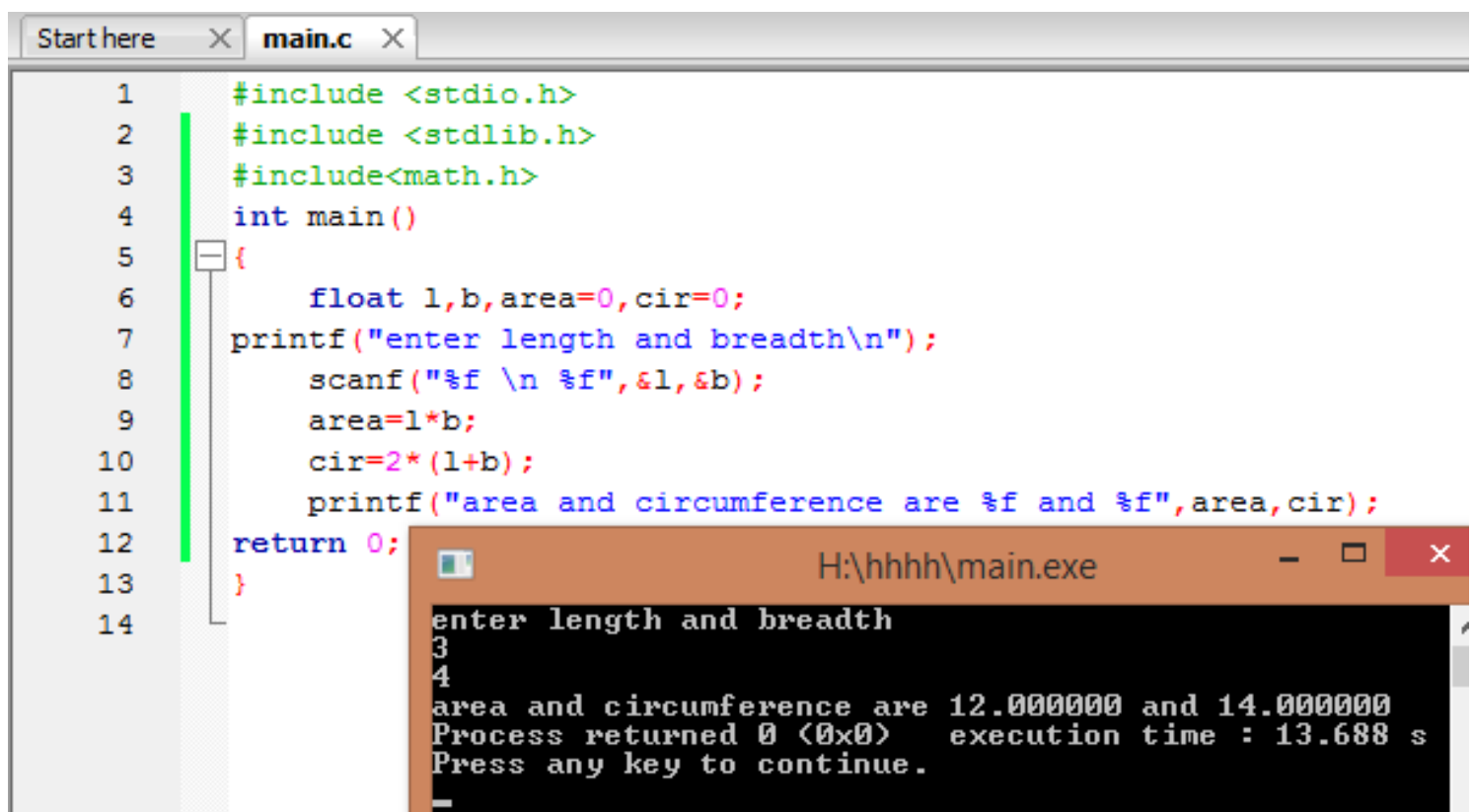
sum is 240
Process returned 0 (0x0)
Press any key to continue.

The image shows a code editor window with a file named `main.c` and a command prompt window running the program. The code in `main.c` calculates the area and circumference of a circle with a radius of 5. The command prompt shows the input '5' and the output 'area and circumference are 78.500000 and 31.400002', along with process information and a 'Press any key to continue.' prompt.

```
1  #include <stdio.h>
2  #include <stdlib.h>
3  #include<math.h>
4  int main()
5  {
6      float r,area=0,cir=0;
7      printf("enter radius \n");
8      scanf("%f",&r);
9      area=3.14f*r*r;
10     cir=2*3.14f*r;
11     printf("area and circumference are %f and %f",area,cir);
12     return 0;
13 }
14
```

Execution output:

```
H:\hhhh\main.exe
enter radius
5
area and circumference are 78.500000 and 31.400002
Process returned 0 (0x0)   execution time : 2.922 s
Press any key to continue.
```



The image shows a C program in a code editor and its execution in a command prompt. The code editor window has tabs for 'Start here' and 'main.c'. The code in 'main.c' is as follows:

```
1  #include <stdio.h>
2  #include <stdlib.h>
3  #include<math.h>
4  int main()
5  {
6      float l,b,area=0,cir=0;
7      printf("enter length and breadth\n");
8      scanf("%f \n %f",&l,&b);
9      area=l*b;
10     cir=2*(l+b);
11     printf("area and circumference are %f and %f",area,cir);
12     return 0;
13 }
14
```

The command prompt window, titled 'H:\hhhh\main.exe', shows the execution of the program. It prompts the user to 'enter length and breadth', where the values '3' and '4' are entered. The program then outputs 'area and circumference are 12.000000 and 14.000000'. Below this, it shows 'Process returned 0 (0x0)' and 'execution time : 13.688 s'. The prompt 'Press any key to continue.' is displayed, and a single underscore character '_' is shown as input.

Start here X

main.c X

1

#include <stdio.h>

2

#include <stdlib.h>

3

#include<math.h>

4

int main()

5

{

6

float h,b,area=0;

7

printf("enter height and breadth\n");

8

scanf("%f \n %f",&h,&b);

9

area=(h*b)/2;

10

printf("area is %f",area);

11

return 0;

12

}

13

H:\hhhh\mai

enter height and breadth

5

6

area is 15.000000

Process returned 0 (0x0)

Press any key to continu

<

The image shows a code editor window with a file named `main.c` and a terminal window showing the output of the program.

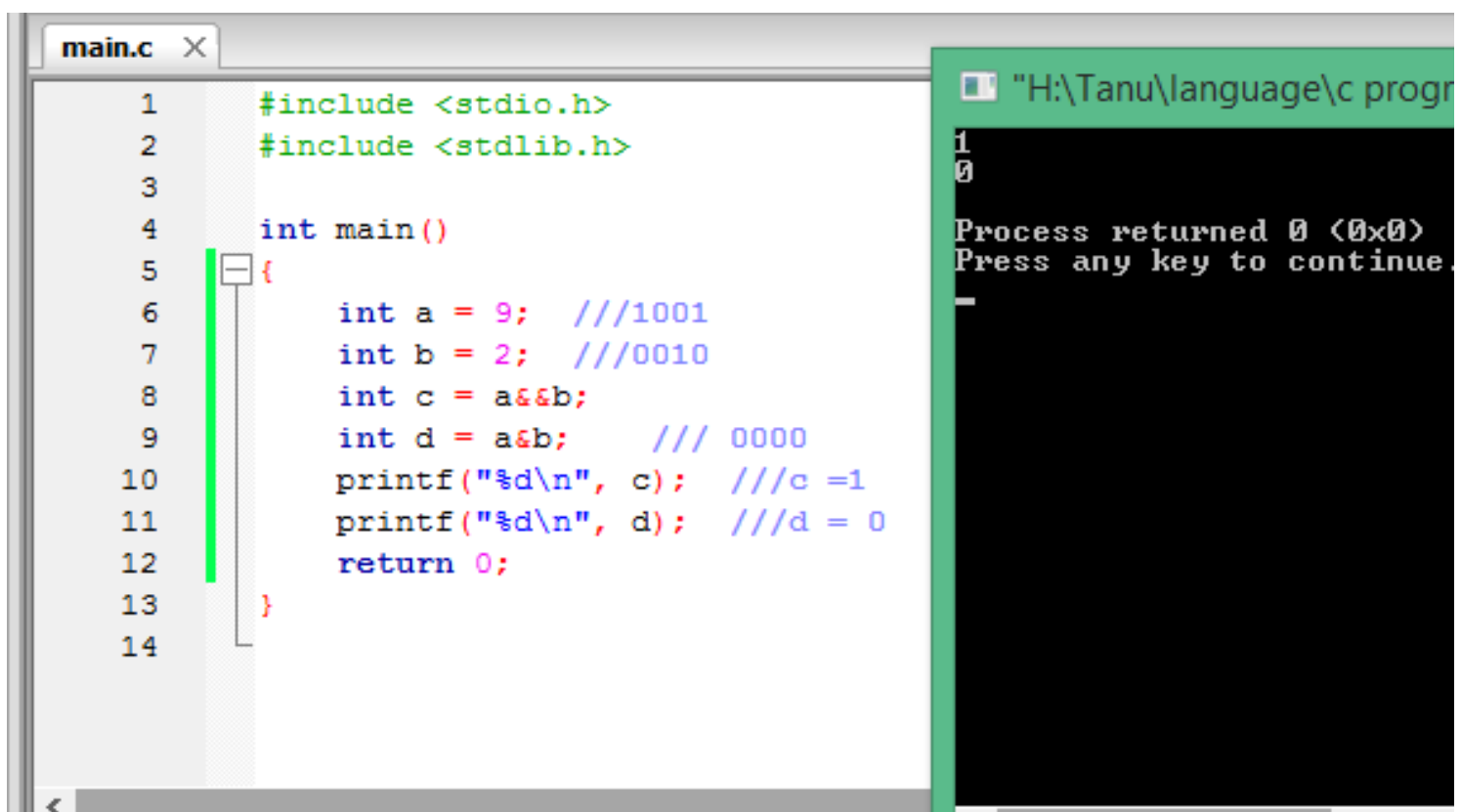
Code Editor (main.c):

```
1  #include <stdio.h>
2  #include <stdlib.h>
3
4  int main()
5  {
6      if(0)
7          printf("Hello world!\n");
8      if(1)
9          printf("Hello world! 1\n");
10     if(10)
11         printf("Hello world!10\n");
12     if(-27)
13         printf("Hello world! -27\n");
14     return 0;
15 }
16
```

Terminal Window:

```
"H:\Tanu\language\c programmes\c programs\testcases..."
Hello world! 1
Hello world!10
Hello world! -27

Process returned 0 (0x0)   execution time : 0.016 s
Press any key to continue.
```



The image shows a screenshot of a C program being executed. On the left is a code editor window titled "main.c" with a line number margin from 1 to 14. The code is as follows:

```
1  #include <stdio.h>
2  #include <stdlib.h>
3
4  int main()
5  {
6      int a = 9;    ///1001
7      int b = 2;    ///0010
8      int c = a&&b;
9      int d = a&b;   /// 0000
10     printf("%d\n", c);  ///c =1
11     printf("%d\n", d);  ///d = 0
12     return 0;
13 }
14
```

On the right is a terminal window with a green title bar showing the path "H:\Tanu\language\c progr". The terminal output is:

```
1
0
Process returned 0 (0x0)
Press any key to continue.
```