Q:1

main.c

Run

Output

```c
#include <stdio.h>
int main()
{
   int a = 125, b = 12345;
long ax = 1234567890;
short s = 4043;
float x = 2.13459;
double dx = 1.1415927;
char c = 'W';
unsigned long ux = 2541567890;
printf("a+c=%d\n",a+c);
printf("x+c=%f\n",x+c);
printf("dx+x=%f\n",dx+x);
printf("a+x=%f\n",a+x);
printf("s+b=%d\n",s+b);
printf("ax+b=%ld\n",ax+b);
printf("s+c=%hd\n",s+c);
printf("ax+c=%ld\n",ax+c);
printf("ax+ux=%lu\n",ax+ux);
return 0;
```

```
/tmp/ORPP6sWAxi.o
a+c=212
x+c=89.134590
dx+x=3.276183
a+x=127.134590
s+b=16388
ax+b=1234580235
s+c=4130
ax+c=1234567977
ax+ux=3776135780
```

Q:2

main.c

Run

Output

```c

#include <stdio.h>
int main()
{
    int days, years, weeks;
    printf("enter no of days:");
    years = days/365;
    weeks = (days % 365)/7;
    days = days- ((years*365) + (weeks*7));

    printf("Years: %d\n", years);
    printf("Weeks: %d\n", weeks);
    printf("Days: %d \n", days);

    return 0;
}
```

```
/tmp/ORPP6sWAxi.o
enter no of days:Years: 89
Weeks: 39
Days: 6
```

Q:3

```c
#include <stdio.h>
int main()
   {
    double w1, c1, w2, c2, result;
    printf("Weight - Item1: ");
    scanf("%lf", &w1);
    printf("No. of item1: ");
    scanf("%lf", &c1);
    printf("Weight - Item2: ");
    scanf("%lf", &w2);
    printf("No. of item2: ");
    scanf("%lf", &c2);
    result = ((w1 * c1) + (w2 * c2)) / (c1 + c2);
    printf("Average Value = %f\n", result);
    return 0;
}
```

```
/tmp/ORPP6sWAxi.o
Weight - Item1: 13
No. of item1: 12
Weight - Item2: 12
No. of item2: 8
Average Value = 12.600000
```

Q:4

```c
#include <stdio.h>
int main()
{
enum week{Sun, Mon, Tue, Wed, Thu, Fri, Sat};
printf("Sun = %d", Sun);
printf("\nMon = %d", Mon);
printf("\nTue = %d", Tue);
printf("\nWed = %d", Wed);
printf("\nThu = %d", Thu);
printf("\nFri = %d", Fri);
printf("\nSat = %d", Sat);
return 0;
}
```

```
/tmp/ORPP6sWAxi.o
Sun = 0
Mon = 1
Tue = 2
Wed = 3
Thu = 4
Fri = 5
Sat = 6
```

Q:5

```c
#include<stdio.h>
int main()
{
float fahrenheit, celsius;
printf("enter temperature in celsius :" );
scanf("%f",&celsius);
fahrenheit =( (celsius*9)/5)+32;
printf("\n\n Temperature in fahrenheit is: %f",fahrenheit);
return (0);
}
```

```
/tmp/ORPP6sWAxi.o
enter temperature in celsius :67
Temperature in fahrenheit is: 152.600006
```

Q:6

```c
#include<stdio.h>
int main()
{
int minute;
printf("\n enter  minute=");
scanf("%d",&minute);
//hours=minute/60,minute=minute % 60
printf("\nentered minute is equivalent to=%d hour,%d minute"
     ,minute,minute/60,minute%60);

return 0;
}
```

```
/tmp/ORPP6sWAxi.o
enter  minute=34

entered minute is equivalent to=34 hour,0 minute
```

Q:7

```c
#include <stdio.h>

int main()
{
    float length, width, perimeter;


    printf("Enter length of the rectangle: ");
    scanf("%f", &length);
    printf("Enter width of the rectangle: ");
    scanf("%f", &width);
    perimeter = 2 * (length + width);
    printf("Perimeter of rectangle = %f units ", perimeter);

    return 0;
}
```

```
/tmp/ORPP6sWAxi.o
Enter length of the rectangle: 43
Enter width of the rectangle: 5
Perimeter of rectangle = 96.000000 units
```

Q:8

```c
// Online C compiler to run C program online
#include <stdio.h>

int main() {
    int a = 9,b = 4, c;

    c = a+b;
    printf("a+b = %d \n",c);
    c =a/b;
    printf("a/b = %d \n",c);
    c %= a;     // c = 0
    printf("c = %d\n", c);
     printf("%d >= %d is %d \n", a, b, a >= b);
      c = !(a != b);
    printf("!(a != b) is %d \n",c);
    return 0;
}
```

```
/tmp/ZHtBEhCGbH.o
a+b = 13
a/b = 2
c = 2
9 >= 4 is 1
!(a != b) is 0
```

Q:9

```c
// Online C compiler to run C program online
#include <stdio.h>

int main() {
    int a=11,b=5;
    printf("output=%d",a&b);
    printf("\noutput=%d",a|b);
    printf("\nRight shift by %d:%d\n",b,a>>b);
     (a > b) ? a : b;//conditional operator

  printf("the value of 'b' variable is :%d",b);
  return 0;
}

```

```
/tmp/ZHtBEhCGbH.o
output=1
output=15
Right shift by 5:0
the value of 'b' variable is :5
```

Q:10

```c
#include<stdio.h>
int main() {
    int a;
    float b;
    double c;
    char d;

    // sizeof evaluates the size of a variable
    printf("Size of int: %lu bytes\n", sizeof(a));
    printf("Size of float: %lu bytes\n", sizeof(b));
    printf("Size of double: %lu bytes\n", sizeof(c));
    printf("Size of char: %lu byte\n", sizeof(d));

    return 0;
}
```

```
/tmp/ORPP6sWAxi.o
Size of int: 4 bytes
Size of float: 4 bytes
Size of double: 8 bytes
Size of char: 1 byte
```