Q1.

```
#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("((int) dx) + ax =  %ld\n", ((int) dx) + ax);
 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;
```

Output:

```
a + c =  212
```

x + c = 89.134590

dx + x = 3.276183

((int) dx) + ax = 1234567891

a + x = 127.134590

s + b = 16388

ax + b = 1234580235

s + c = 4130

ax + c = 1234567977

ax + ux = 3776135780

Q2. Convert specified days into years, weeks and days.

```
#include <stdio.h>

int main()
{
  int NoOfDays, years, weeks, days;
 printf("\n  Enter the Number of days  :  ");
 scanf("%d", &NoOfDays);
 years = NoOfDays / 365;
 weeks = (NoOfDays % 365) / 7;
 days = (NoOfDays % 365) % 7;
  printf("\n Years  = %d", years);
  printf("\n Weeks  = %d", weeks);
```

```
 printf("\n Days   = %d", days);
 return 0;
}
```

output:-

```
Enter the number of days:900
 Years  = 2
 Weeks  = 24
 Days   = 2
```

Q3.Accepts two item’s weight (floating points' values) and number of purchase (floating points' values) and calculate the average value of the items.

```
#include <stdio.h>
int main()
  {
        double wi1, ci1, wi2, ci2, result;
   printf("Weight - Item1: ");
        scanf("%lf", &wi1);
        printf("No. of item1: ");
        scanf("%lf", &ci1);
        printf("Weight - Item2: ");
        scanf("%lf", &wi2);
        printf("No. of item2: ");
        scanf("%lf", &ci2);
        result = ((wi1 * ci1) + (wi2 * ci2)) / (ci1 + ci2);
        printf("Average Value = %f\n", result);
```

```
        return 0;
}
```

Output:-

```
Weight - Item1: 190.67
No. of item1: 5
Weight - Item2: 200.10
No. of item2: 5
Average Value = 195.385000
```

Q4. Create enumerated data type for 7 days and display their values in integer constant.

```
#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;
}
```

Output:-

Sun = 0

Mon = 1

Tue = 2

Wed = 3

Thu = 4

Fri = 5

Sat = 6

Q5. Convert Celsius into Fahrenheit.

```
#include<stdio.h>

        int main()

        {

        float fahrenheit, celsius;

        celsius = 40;

        fahrenheit =( (celsius*9)/5)+32;

        printf("\n\n Temperature in fahrenheit is:  %f",fahrenheit);

           return (0);

  }
```

Output:-

Temperature in fahrenheit is: 104

Q7. Print perimeter of a rectangle to take its height and width as input.

```
#include<stdio.h>

int main()

{

  float height,width, Perimeter;

 printf ("\n  Enter the Height of a Rectangle  :  ");

  scanf ("%f",&width);

 printf ("\n  Enter the Width of a Rectangle :  ");

  scanf ("%f",&width);

Perimeter = 2 * (height + width);

 printf("\n Perimeter of a Rectangle =  %.2f", Perimeter);

return 0;

}
```

Output:-

```
 Enter the Height of a Rectangle  :  80

 Enter the Width of a Rectangle :  125
Perimeter of a Rectangle =  250.00
```

Q8.By using +,/,=%,>=,! operators.

```
#include <stdio.h>

int main()

{

 int a=10,b=20,c;

printf(" a+b= %d \n",a+b);

printf("a/b= %d \n",a/b);

b %= a;

 printf("b = %d\n", b);

 printf(" a>=b =%d \n",a>=b);

 printf("!(a != b) is %d \n", !(a != b));

return 0;
```

```
}
```

Output:

```
a+b= 30

a/b= 0

b = 0

 a>=b =1

!(a != b) is 0
```

Q9.By using &,|,>>,?:,|| operators.

```
#include <stdio.h>

int main()

{

   int a=10,b=20,c;

   printf(" a&b= %d \n",a&b);

   printf("a|b= %d \n",a|b);

   printf("a>>b %d\n", a>>b);

   printf(" a?:b =%d \n",a?:b);
```

```
    printf("a||b %d \n", a||b);

    return 0;

}
```

Output:

a&b= 0

a|b= 30

a>>b 0

a?:b =10

a||b 1

Q10. Find the size of int ,float, double and char.

```
#include <stdio.h>

int main()

{

int integerType;

float floatType;
```

```
double doubleType;

char charType;

printf("Size of int is: %ld\n",

sizeof(integerType));

printf("Size of char is: %ld\n",

sizeof(charType));

printf("Size of float is: %ld\n",

sizeof(floatType));

 printf("Size of double is: %ld\n",

sizeof(doubleType));

return 0;

}
```

Output:-

```
Size of int is: 4

Size of char is: 1

Size of float is: 4
```

Size of double is: 8