TASK3

- Basic C programming exercises.

Problem 3

main.c

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

int main() {
    float num1 ,num2;
    printf("Please enter the first number=");
    scanf("%f",& num1);
    printf("Please enter the second number=");
    scanf("%f",& num2);
    printf("The summation of %.01f + %.01f =%.01f \n", num1,num2
        ,num1+num2);
    printf("The subtration of %.01f - %.01f =%.01f \n", num1,num2
        ,num1-num2);
    printf("The Product of %.01f * %.01f =%.01f \n", num1,num2
        ,num1*num2);
    printf("The division of %.01f / %.01f =%.01f \n", num1,num2
        ,num1/num2);

    return 0;
}
```

Output

```
/tmp/Bq4WL1UeL6.o
Please enter the first number=10
Please enter the second number=2
The summation of 10.0 + 2.0 =12.0
The subtration of 10.0 - 2.0 =8.0
The Product of 10.0 * 2.0 =20.0
The division of 10.0 / 2.0 =5.0
```

Problem 4

main.c

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

int main() {
    float length ,breadth;
    printf("Please enter the length(cm)=");
    scanf("%f",& length);
    printf("Please enterthe breadth(cm)=");
    scanf("%f",& breadth);
        printf("The area of rectangle is 2*( %.01f + %.01f) =%.01f
            cm2\n", length,breadth,2*(length+breadth));


    return 0;
}
```

Output

```
/tmp/Bq4WL1UeL6.o
Please enter the length(cm)=5
Please enterthe breadth(cm)=2
The area of rectangle is 2*( 5.0 + 2.0) =14.0 cm2
```

Problem 5

main.c

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

int main() {
    float length ,breadth;
    printf("Please enter the length(cm)=");
    scanf("%f",& length);
    printf("Please enterthe breadth(cm)=");
    scanf("%f",& breadth);
        printf("The area of rectangle is %.01f * %.01f =%.01f cm2\n",
            length,breadth,length*breadth);


    return 0;
}
```

Output

```
/tmp/Bq4WL1UeL6.o
Please enter the length(cm)=5
Please enterthe breadth(cm)=2
The area of rectangle is 5.0 * 2.0 =10.0 cm2
```

Problem 6

main.c

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

int main() {
    float rad;
    printf("Please enter the radius of the circle(cm)=");
    scanf("%f",& rad);
    printf("The diameter of the circle is 2* %.01f =%.01f cm\n",rad,2
        *rad);
    printf("The circumference  of the circle is 2* 3.14*%.01f =%.01f
        cm\n",rad,2*3.14*rad);
    printf("The area  of the circle is  3.14*%.01f*%.01f =%.01f
        cm2\n",rad,rad,3.14*rad*rad);

    return 0;
}
```

Output

```
/tmp/Bq4WL1UeL6.o
Please enter the radius of the circle(cm)=2
The diameter of the circle is 2* 2.0 =4.0 cm
The circumference  of the circle is 2* 3.14*2.0 =12.6 cm
The area  of the circle is  3.14*2.0*2.0 =12.6 cm2
```

Problem 7

main.c

Run

Output

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

int main() {
    float length;
    printf("Please enter the legth(cm)=");
    scanf("%f",& length);
    printf("The length in meter  %.01f/100 =%.01f m\n",length,length
        /100);
   printf("The length in kilometer  %.01f/1000 =%.01f km\n",length
       ,length/1000);


    return 0;
}
```

```
/tmp/Bq4WL1UeL6.o
Please enter the legth(cm)=100
The length in meter  100.0/100 =1.0 m
The length in kilometer  100.0/1000 =0.1 km
```

Problem 8

main.c

Run

Output

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

int main() {
    float temp;
    printf("Please enter the temperature(celeius)=");
    scanf("%f",& temp);
    printf("The temperature in fahrenheit  %.01f*(9/5)+32 =%.01f f\n"
        ,temp,temp*(9/5)+32);


    return 0;
}
```

```
/tmp/Bq4WL1UeL6.o
Please enter the temperature(celeius)=0
The temperature in fahrenheit  0.0*(9/5)+32 =32.0 f
```

Problem 10

main.c

Run

Output

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

int main() {
    int days ,weeks, years;
    printf("Please enter the numbedr of days=");
    scanf("%d",& days);
    years = (days / 365);   // Ignoring leap year
    weeks = (days % 365) / 7;
    days  = days - ((years * 365) + (weeks * 7));
    printf("There are %d years, %d weeks, %d days \n",years,weeks
        ,days);


    return 0;
}
```

```
/tmp/Bq4WL1UeL6.o
Please enter the numbedr of days=366
There are 1 years, 0 weeks, 1 days
```

Problem 11

main.c

Run

Output

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

int main() {
    float num ,exp;
    printf("Please enter the number=");
    scanf("%f",& num);
     printf("Please enter the exponent=");
    scanf("%f",& exp);

    printf("%.01f ^ %.01f = %.01f", num,exp,pow(num,exp));

    return 0;
}
```

```
/tmp/Bq4WL1UeL6.o
Please enter the number=5
Please enter the exponent=2
5.0 ^ 2.0 = 25.0
```

Problem 12

main.c

Run

Output

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

int main() {
    float num ;
    printf("Please enter the number=");
    scanf("%f",& num);

    printf("the squre root of %.01f = %.01f", num,sqrt(num));


    return 0;
}
```

```
/tmp/Bq4WL1UeL6.o
Please enter the number=25
the squre root of 25.0 = 5.0
```

Problem 16

main.c

Run

Output

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

int main() {
    float sub1,sub2,sub3,sub4,sub5 ,sum;
    printf("Please enter the degree of first subject=");
    scanf("%f",& sub1);
    printf("Please enter the degree of second subject=");
    scanf("%f",& sub2);
    printf("Please enter the degree of third subject=");
    scanf("%f",& sub3);
    printf("Please enter the degree of fourth subject=");
    scanf("%f",& sub4);
    printf("Please enter the degree of Fifth subject=");
    scanf("%f",& sub5);
    sum =sub1+sub2+sub3+sub4+sub5;

    printf("the total = %.01f\n",sum );
    printf("the average = %.01f\n",sum/5);
    printf("the persentage = %.01f\n",(sum/500)*100);


    return 0;
}
```

```
/tmp/Bq4WL1UeL6.o
Please enter the degree of first subject=50
Please enter the degree of second subject=50
Please enter the degree of third subject=50
Please enter the degree of fourth subject=50
Please enter the degree of Fifth subject=50
the total = 250.0
the average = 50.0
the persentage = 50.0
```

I am a little bit confused with Bitwise operator exercises.