1. Display multiple variables.

Sample Variables :

a+ c, x + c,dx + x, a + x, s + b, ax + b, s + c, ax + c, ax + ux

Declaration :

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;

Solution:-

```
#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;
}
```

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

Solution:-

```
#include <stdio.h>
main()
{
   int days, years, weeks;

   Printf(“enter days”);
Scanf(“%d”,&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);
}
```

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

Solution:-

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

}
```

4. Create enumerated data type for 7 days and display their values in integer constants.

Solution:-

```
#include <stdio.h>
 main()
{
enum week{Sun=1, Mon, Tue, Wed, Thu, Fri, Sat};
printf("Sunday= %d", Sun);
printf("\nmonday = %d", Mon);
printf("\nTuesday = %d", Tue);
printf("\nwednesday = %d", Wed);
printf("\n Thursday = %d", Thu);
printf("\nFriday = %d", Fri);
printf("\nSaturday = %d", Sat);

}
```

5. Converts Centigrade to Fahrenheit.

Solution:-

```c
#include <stdio.h>

int main()
{
    float celsius, fahrenheit;


    printf("Enter temperature in Celsius: ");
    scanf("%f", &celsius);
    fahrenheit = (celsius * 9 / 5) + 32;

    printf("%.2f Celsius = %.2f Fahrenheit", celsius, fahrenheit);

    return 0;
}
```

6. Takes minutes as input, and display the total number of hours and minutes.

Solution:-

```c
#include<stdio.h>

 main()

{

int minute;

printf("\n\n\tEnter minutes = ");

scanf("%d",&minute);

printf("\n\t Entered minutes = %d minutes \n\t Which is equivalent to = %d hours and %d minutes",minute,minute/60,minute%60);

}
```

7. Prints the perimeter of a rectangle to take its height and width as input.

Solution:-

```
#include <stdio.h>

int main() {

float rec_width;

float rec_height;

float rec_perimeter;



        printf("Input the height of the Rectangle : ");

        sscanf(line_text, "%f", &rec_height);

        printf("Input the width of the Rectangle : ");

        sscanf(line_text, "%f", &rec_width);

        rec_perimeter = 2.0 * (rec_height + rec_width); /* perimeter = 2 * ( width
+ height )*/

        printf("Perimeter of the Rectangle is : %f\n", rec_perimeter);

        return 0;

}
```

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

Solution:-

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

```
 main()
{

float a,b,c;

a=12;
b=14;
printf("Addition=%f",a+b);
printf("\n Division=%f",a/b);

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

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

Solution:-

```
#include<stdio.h>

 main()
{

int  a,b,c;
```

```
a=12;
b=14;
printf("\n %d",a&b);
printf("\n %d",a|b);
printf("\n %d",a>>b);
printf("\n %d",a||b);
}
```

10. Find the Size of int, float, double and char.

Solution:-

```
#include<stdio.h>

 main()
{

printf("\nsize of int=%d",sizeof(int));
printf("\nsize of float=%d",sizeof(float));
printf("\nsize of char=%d",sizeof(char));
printf("\nsize of double=%d",sizeof(double));




  }
```