Q.n 1)Write a C Program for the following problem statements

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;
```

Ans)

```
#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=%f\n",s+c);
  printf("ax+c=%ld\n",ax+c);
  printf("ax+ux=%ld\n",ax+ux);
  return 0;
}
```

Q.n 2)Convert specified days into years, weeks & days.

Ans)

```
#include<stdio.h>
int main()
{
  int days,week,month,year;
  printf("Enter the days");
  scanf("%d",&days);
```

```
year=days/365;
month=days/30;
week=days/7;
printf(“year:%d\nmonth:%d\nweek:%d\n”,year,month,week);
}
```

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

Ans)

```
#include<stdio.h>
Int main()
{
  float a,c,e; int b,d;
  printf(“enter the 1st  weight”);
scanf(“%f”,&a);
printf(“enter the no. of purchase”);
scanf(“%d”,&b);
printf(“enter the 2nd weight”);
scanf(“%f”,&c);
printf(“enter the no. of purchase”);
scanf(“%d”,&d);
e=((a*b)+(c*d))/(b+d);
printf(“so the average is=%f”,e);
return 0;
}
```

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

Ans)

```
#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;
}
```

Q.n 5) Converts Centigrade to Fahrenheit.

```
#include<stdio.h>
int main()
{
float c,f;
printf(“enter the centigrade value”);
scanf(“%f”,&c);
f=(9*c+160)/5;
printf(“the Fahrenheit value is %f”,f);
return 0;
}
```

Q.n6) Takes minutes as input, and display the total number of hours and minutes.

Ans)

```
#include<stdio.h>
int main()
{
int minute;
printf(“\n\n\tEnter minute=”);
scanf(“%d”,&minute);
printf(“\n\t Enter minute=%d minutes \n\t which is equivalent to %d hours and %d
minutes”,minute,minute/60,minute%60);
return 0;
}
```

Q,n7) Prints the perimeter of a rectangle to take its height and width as input.

Ans)

```
#include<stdio.h>
int main()
{
int a,b;
printf(“enter height”);
scanf(“%d”,&a);
printf(“enter width”);
scanf(“%d”,&b);
printf(“its perimeter value is= %d”, 2*(a+b));
return 0;
}
```

Que 10) Find the Size of int, float, double and char

Ans)

```
#include <stdio.h>int main()
{
int a;
float b;
double c;
char d;
printf("int=%d bytes\n",sizeof(a));
printf("float=%d bytes\n",sizeof(b));
printf("double=%d bytes\n",sizeof(c));
printf("char=%d byte\n",sizeof(d));
return 0;
}
```

```
int=4 bytes
float=4 bytes
double=8 bytes
char=1 byte
```