**Q1.** #include<stdio.h>

int main(){

int a=125, b=12345; //a+ c, x + c,dx + x, a + x, s + b, ax + b, s + c, ax + c, ax + ux

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;

}

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

**Q2.** #include <stdio.h>

int main()

{

int days, years, weeks;

printf("Enter number of 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);

return 0;

}

Enter number of days: 255

Years: 0

Weeks: 36

Days: 3

**Q3**. #include<stdio.h>

int main(){

float w\_itm1, w\_itm2, no\_itm1, no\_itm2, avg;

printf("weight of item1: ");

scanf("%f",&w\_itm1);

printf("weight of item2: ");

scanf("%f",&w\_itm2);

printf("number of item1: ");

scanf("%f",&no\_itm1);

printf("number of item2: ");

scanf("%f",&no\_itm2);

avg=(w\_itm1\*no\_itm1)+(w\_itm2\*no\_itm2)/(no\_itm1+no\_itm2);

printf("Average value = %f\n",avg);

}

weight of item1: 20

weight of item2: 25

number of item1: 4

number of item2: 5

Average value = 93.888885

**Q4.** #include <stdio.h>

int main()

{

enum week{Sun=1, 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;

}

Sun = 1

Mon = 2

Tue = 3

Wed = 4

Thu = 5

Fri = 6

Sat = 7

**Q5.** #include<stdio.h>

int main(){

float fahrenheit, celsius;

printf("Enter celsius: ");

scanf("%f",&celsius);

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

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

return 0;

}

Enter celsius: 25

Temperature in fahrenheit is: 77.000000

**Q6.** #include<stdio.h>

int main(){

int tot\_mins, mins, hours;

printf("Enter total minutes: ");

scanf("%d",&tot\_mins);

hours=tot\_mins/60;

mins=tot\_mins%60;

printf("%d Hours, %d Minutes.\n", hours, mins);

}

Enter total minutes: 120

2 Hours, 0 Minutes.

**Q7.** #include <stdio.h>

int main() {

float width, height, perimeter;

printf("Enter the width: ");

scanf("%f", &width);

printf("Enter the height: ");

scanf("%f", &height);

perimeter = 2 \* (width + height);

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

return 0;

}

Enter the width: 25

Enter the height: 50

Perimeter of the Rectangle is : 150.000000

**Q8**. #include<stdio.h>

int main()

{

int a=22, b=10, c;

c = a+b;

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

c = a/b;

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

a%=b;

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

a = 22;

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

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

return 0;

}

a+b = 32

a/b = 2

a = 2

22 != 2 is 1

22 >= 2 is 1

**Q9.** //By using &, |, >>, ?:, || operator

#include<stdio.h>

int main(){

int a = 12, b = 25, c=212, result;

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

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

int n=2;

printf("Right shift by %d:%d \n",n, c>>2);

result = (a == b) || (c > b);

printf("(a == b) || (c > b) is %d \n",result);

result = ((a==7)?(3):(2));

printf("The value of 'result' variable is : %d",result);

return 0;

}

a&b = 8

a|b = 29

Right shift by 2:53

(a == b) || (c > b) is 1

The value of 'result' variable is : 2

**Q10**. #include <stdio.h>

int main(){

int a;

float b;

double c;

char d;

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;

}

Size of int=4 bytes

Size of float=4 bytes

Size of double=8 bytes

Size of char=1 byte