**ASSIGNMENT-3**

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;

**PROGRAM:**

#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 = %g \n", x + c);

printf("dx + x = %g \n", dx + x);

printf("a + x = %g \n", a + x);

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

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

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

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

printf("ax + ux = %ld \n", ax + ux);

return 0;

}

**OUTPUT:**

a + c = 212

x + c = 89.1346

dx + x = 3.27618

a + x = 127.135

s + b = 16388

ax + b = 1234580235

s + c = 4130

ax + c = 1234567977

ax + ux = 3776135780

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

**PROGRAM:**

#include <stdio.h>

int main()

{

int years, weeks, days;

int given\_days=1000;

years = given\_days/365;

weeks = (given\_days%365)/7;

days= given\_days - ((years\*365) + (weeks\*7));

printf("Years are %d \n", years);

printf("Weeks are %d \n", weeks);

printf("Days are %d \n", days);

return 0;

}

**OUTPUT:**

Years are 2

Weeks are 38

Days are 4

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

constant.

**PROGRAM:**

#include<stdio.h>

int main()

{

enum days{sun, mon, tue, wed, thu, fri, sat};

printf("Sun=%d \n Mon=%d \n Tue=%d \n Wed=%d \n Thu=%d \n

Fri=%d \n Sat=%d \n", sun, mon, tue, wed, thu, fri, sat);

return 0;

}

**OUTPUT:**

Sun=0

Mon=1

Tue=2

Wed=3

Thu=4

Fri=5

Sat=6

1. Convert Centigrade to Fahrenheit.

**PROGRAM:**

#include <stdio.h>

int main()

{

float celsius, fahrenheit;

printf("Enter temperature in Celsius: ");

scanf("%f", &celsius);

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

printf("Temperature In Fahrenheit is %g", fahrenheit);

return 0;

}

**OUTPUT:**

Enter temperature in Celsius: 75.80

Temperature In Fahrenheit is 168.44

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

**PROGRAM:**

#include <stdio.h>

int main()

{

int hours, minutes;

int given\_minutes=100;

hours = given\_minutes/60;

minutes = given\_minutes%60;

printf("Total no. of hours are %d \n", hours);

printf("Total number of minutes are %d \n", minutes);

return 0;

}

**OUTPUT:**

Total no. of hours are 1

Total number of minutes are 40

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

**PROGRAM:**

#include<stdio.h>

int main()

{

int height=10, width=20, perimeter;

perimeter = 2\*(height + width);

printf("The perimeter of the rectangle is %d \n", perimeter);

return 0;

}

**OUTPUT:**

The perimeter of the rectangle is 60

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

**PROGRAM:**

#include<stdio.h>

int main()

{

int a = 12 , b = 6 ;

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", a != b);

return 0;

}

**OUTPUT:**

a + b = 18

a / b = 2

a %= b = 0

a >= b = 0

a ! b = 1

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

**PROGRAM:**

#include<stdio.h>

int main()

{

int a = 12 , b = 6 ;

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 = 4

a | b = 14

a >> b = 0

a ?: b = 12

a || b = 1

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

**PROGRAM:**

#include<stdio.h>

int main()

{

int a ;

float b ;

double c ;

char d ;

printf("size of int is %d bytes \n",sizeof(a));

printf("size of float is %d bytes \n",sizeof(b));

printf("size of double is %d bytes \n",sizeof(c));

printf("size of char is %d bytes \n",sizeof(d));

return 0;

}

**OUTPUT:**

size of int is 4 bytes

size of float is 4 bytes

size of double is 8 bytes

size of char is 1 bytes

1. Accepts two item’s weight (floating points' values ) and number of

purchase(floating points' values) and calculate the average value of the items.

**PROGRAM:**

#include <stdio.h>

int main()

{

float w1, c1, w2, c2, average;

printf("Weight of item1:");

scanf("%f", &w1);

printf("No.of item1:");

scanf("%f", &c1);

printf("Weight of item2:");

scanf("%f", &w2);

printf("No. of item2:");

scanf("%f", &c2);

average = ((w1 \* c1) + (w2 \* c2)) / c1 + c2;

printf("Average value of items are %g \n", average);

return 0;

}

**OUTPUT:**

Weight of item1:2.5

No.of item1:2

Weight of item2:3.5

No. of item2:4

Average value of items are 13.5