

ASSIGNMENT-3

Q1)DISPLAY MULTIPLE VARIABLES .

SIMPLE 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("value of a+c=%d\n",a+c);  
    printf("value of x+c=%f\n",x+c);  
    printf("value of dx+x=%f\n",dx+x);  
    printf("value of a+x=%f\n",a+x);  
    printf("value of s+b=%d\n",s+b);  
    printf("value of ax+b=%lu\n",ax+b);  
    printf("value of s+c=%c\n",s+c);  
    printf("value of ax+c=%lu\n",ax+c);  
    printf("value of ax+ux=%lu\n",ax+ux);  
    return 0;  
  
}
```

OUTPUT:

value of a+c=212

value of x+c=89.134590

value of dx+x=3.276183

value of $a+x=127.134590$
value of $s+b=16388$
value of $ax+b=1234580235$
value of $s+c=$
value of $ax+c=1234567977$
value of $ax+ux=3776135780$

Q2) CONVERT SPECIFICIED DAYS INTO YEARS, WEEKS AND DAYS.

PROGRAM:

```
#include<stdio.h>

int main() {
    int years, weeks, days;
    printf("enter total days");
    scanf("%d", &days);
    years=days/365;
    weeks=(days%365)/7;
    days=days-((years*365)+(weeks*7));
    printf("no of years=%d", years);
    printf("no of weeks =%d", weeks);
    printf("no of days=%d", days);
    return 0;

}
```

OUTPUT

enter total days=900
no of years=2
no of weeks =24
no of days=2

Q3)3. 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, w2, np1, np2, avg;
    printf("Enter weight of 1st item: ");
```

```

scanf("%f",&w1);
printf("no of purchase: ");
scanf("%f",&np1);
printf("Enter weight of 2nd item: ");
scanf("%f",&w2);
printf("no of purchase: ");
scanf("%f",&np2);
avg=((w1*np1)+(w2*np2))/(np1+np2);
printf("average value of the item is : %f\n",avg);
return 0;
}

```

OUTPUT

```

Enter weight of 1st item: 20
no of purchase: 5
Enter weight of 2nd item: 40
no of purchase: 10
average value of the item is : 33.3333333

```

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

PROGRAM:

```

#include <stdio.h>
enum days{sunday,monday,tuesday,wedday,thursday,friday,satday};
int main() {
    printf("enum of days :
\n%d\t%d\t%d\t%d\t%d\t%d\t%d\n",sunday,monday,tuesday,wedday,thursday,friday,satday);
    return 0;
}

```

OUTPUT

```

enum of days :
0 1 2 3 4 5 6

```

5. Converts Centigrade to Fahrenheit.

PROGRAM:

```

#include<stdio.h>
int main(){
    float centigrade ,farenhite ;
    printf("Enter the celcius= ");
}

```

```
scanf("%f",&centigrade);
farenhite = (centigrade * 9/5)+32;
printf("Farenhite is=%g",Farenhite);
return 0;
```

OUTPUT

Enter the celcius=65.7
Farenhite is =150.26

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

PROGRAM:

```
include <stdio.h>
int main() {
    int minutes, hours ;
    printf("Enter total minutes= ");
    scanf("%d",&minutes);
    hours=minutes/60;
    minutes=minutes- (hours*60);
    printf("total no of hours=%d\n",hours);
    printf("no of minutes =%d",minutes);

    return 0;
}
```

OUTPUT

Enter total minutes: 128
total no of hours=2
no of minutes =8

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

Program:-

PROGRAM:

```
#include<stdio.h>
int main()
{
    float height,width,perimeter;
```

```

printf("enter height of rectangle : ");
scanf("%f",&height);
printf("enter width of rectangle : ");
scanf("%f",&width);
perimeter=2*(height+width);
printf("Perimeter of rectangle is : %g\n",perimeter);
return 0;
}

```

OUTPUT

```

enter height of rectangle : 6
enter width of rectangle : 4
Perimeter of rectangle is : 20

```

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

PROGRAM:

```

#include<stdio.h>
int main(){
int a,b,c;
printf("enter a = ");
scanf("%d",&a);
printf("enter b = ");
scanf("%d",&b);
c=a+b;
printf("using + operator value is: %d\n",c);
c=a/b;
printf("using / operator value is: %d\n",c);
c=(a%=b);
printf("using pecentage and operator value is: %d\n",c);
c=(a>=b);
printf("using >= operator value is: %d\n",c);
c=!(a=b);
printf("using ! operator value is: %d\n",c);
return 0;
}

```

OUTPUT

```

enter a = 6
enter b = 8
using + operator value is: 14
using / operator value is: 0

```

using percentage and operator value is: 6
using >= operator value is: 0
using ! operator value is: 0

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

PROGRAM:

```
#include<stdio.h>
int main()
{
int a,b,c ;
printf("enter a : ");
scanf("%d",&a);
printf("enter b : ");
scanf("%d",&b);
c=(a&b);
printf(" &value of a and b is : %d\n",c);
c=(a|b);
printf(" | value of a and b is : %d\n",c);
c=(a>>2);
printf("right shift(>>2) value of a is : %d\n",c);
c=(b>>2);
printf("rightshift(>>2) value of b is : %d\n",c);
c=(a<=b)?printf("c is greater than a :\nincorrect\n"):printf("wrong\n");
c=(a<=b||a>b);
printf(" || value of a and b is : %d\n",c);
return 0;
}
```

OUTPUT

```
enter a : 9
enter b : 3
&value of a and b is : 1
| value of a and b is : 11
right shift(>>2) value of a is : 2
rightshift(>>2) value of b is : 0
wrong
|| value of a and b is : 1
```

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

PROGRAM:

```
#include<stdio.h>
int main()
{
    int i;
    float f;
    char c;
    double d;
    printf("Enter character value : ");
    scanf("%c",&c);
    printf("Size of character is %lu in bytes\n",sizeof(c));
    printf("\nEnter integer value : ");
    scanf("%d",&i);
    printf("Size of integer is %lu in bytes\n",sizeof(i));
    printf("\nEnter float value : ");
    scanf("%f",&f);
    printf("Size of float is %lu in bytes\n",sizeof(f));
    printf("\nEnter double value : ");
    scanf("%f",&d);
    printf("Size of double is %lu in bytes\n",sizeof(d));
    return 0;
}
```

OUTPUT

Enter character value : c
Size of character is 1 in bytes

Enter integer value : 20
Size of integer is 4 in bytes

Enter float value : 54.8
Size of float is 4 in bytes

Enter double value : 14.5
Size of double is 8 in bytes