

12/19/24

programs

#add,sub,div,mul on given interger

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

```
int main(){
```

```
    int a,b;
```

```
    printf("enter a number a");
```

```
    scanf("%d",&a);
```

```
    printf("enter a number b");
```

```
    scanf("%d",&b);
```

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

```
    printf("sub =%d\n",a-b);
```

```
    printf("mul =%d\n",a*b);
```

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

```
    return 0;
```

```
}
```

#find avg

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

```
int main(){
```

```
    int a,b,c,d,e,sum,avg;
```

```
    printf("enter 5 numbers\n");
```

```
    scanf("%d %d %d %d %d",&a,&b,&c,&d,&e);
```

```
    sum=a+b+c+d+e;
```

```
    avg=sum/5;
```

```
    printf("avg=%d",avg);
```

```
}
```

```
#area and perimeter
```

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

```
int main(){
```

```
    int length,width,area,perimeter;
```

```
    printf("Enter the length");
```

```
    scanf("%d",&length);
```

```
    printf("Enter the width");
```

```
    scanf("%d",&width);
```

```
    printf("area=%d\n",length*width);
```

```
    printf("perimeter=%d",2*(length+width));
```

```
}
```

```
#principal amount
```

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

```
int main(){
```

```
    int p,r,n;
```

```
    printf("enter the principal amount");
```

```
    scanf("%d",&p);
```

```
    printf("enter the rate of intrest");
```

```
    scanf("%d",&r);
```

```
    printf("enter the no of years");
```

```
    scanf("%d",&n);
```

```
    int result=p*(1+(r/100))^n;
```

```
    printf("the amount is %d",&result);
```

```
}
```

#celcius to fahrenheit

#include<stdio.h>

```
int main(){  
    int t;  
    printf("enter the temperature in celcius");  
    scanf("%d",&t);  
    printf("the temperature in fahrenheit=%d",(t* 9/5) + 32);  
}
```

#swapping of variables

#include<stdio.h>

```
int main(){  
    int a,b;  
    printf("enter the values of a and b");  
    scanf("%d %d",&a,&b);  
    a=a+b;  
    b=a-b;  
    a=a-b;  
    printf("the value of a=%d and b=%d",a,b);  
}
```

#sum of digits of 3 digit number

#include<stdio.h>

```
int main(){  
    int num,sum=0;
```

```

printf("enter a 3 digit number:");
scanf("%d",&num);
while(num>0){
    int last_digit=num%10;
    sum=sum+last_digit;
    num=num/10;
}
printf("the sum is %d",sum);
}

```

#hypotenuse

#include <stdio.h>

#include <math.h>

```

int main() {
    float side1, side2, hypotenuse;
    printf("Enter the lengths of the two sides (legs) of the triangle: ");
    scanf("%f %f", &side1, &side2);
    hypotenuse = sqrt(side1 * side1 + side2 * side2);
    printf("The hypotenuse of the triangle is: %.2f\n", hypotenuse);
    return 0;
}

```

#area and circumference

#include<stdio.h>

#include<math.h>

```

int main(){

```

```

    int r;

```

```
float pi=3.14;

printf("enter the radius");

scanf("%d",&r);

printf("the area is:%f\n",pi*r*r);

printf("the circumference is:%f\n",2*pi*r);

}
```

```
#profit or loss

#include<stdio.h>

int main(){

    int cp,sp;

    printf("enter the cost price:");

    scanf("%d",&cp);

    printf("enter the selling price:");

    scanf("%d",&sp);

    int result=sp-cp;

    if(result>0){

        printf("the profit is %d",sp-cp);

    }

    else if(result<0){

        printf("the profit is %d",cp-sp);

    }

}
```

```
#greater or smaller

#include<stdio.h>

int main(){
```

```
int a,b;

printf("enter 2 integers");

scanf("%d %d",&a,&b);

if(a>b){

    printf("%d is greater",a);

}else if(b>a){

    printf("%d is greater",b);

}else{

    printf("%d and %d are equal",a,b);

}

}
```

```
#voting

#include<stdio.h>

int main(){

    int age;

    printf("enter your age");

    scanf("%d",&age);

    if(age>18){

        printf("eligible to vote");

    }else{

        printf("not eligible");

    }

}
```

```
#valid triangle

#include<stdio.h>
```

```

int main(){
    int a,b,c;
    printf("enter the 3 sides of triangle");
    scanf("%d%d%d",&a,&b,&c);
    if((a+b)>c || (b+c)>a || (a+c)>b){
        printf("valid triangle");
    }else{
        printf("not a valid triangle");
    }
}

```

#grade comparison

```

#include<stdio.h>
int main(){
    int a,b;
    printf("enter mark of 2 students");
    scanf("%d %d",&a,&b);
    if(a>b){
        printf("a has greater mark",a);
    }else if(b>a){
        printf("b has greater mark",b);
    }else{
        printf("both have equal marks");
    }
}

```

```
#greater number
```

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

```
int main(){  
    int a, b, c;  
    printf("Enter 3 numbers a, b, c: ");  
    scanf("%d %d %d", &a, &b, &c);  
  
    if(a > b && a > c){  
        printf("a is greater\n");  
    }  
    else if(b > a && b > c){  
        printf("b is greater\n");  
    }  
    else{  
        printf("c is greater\n");  
    }  
  
    return 0;  
}
```

```
#leap year or not
```

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

```
int main(){  
    int year;  
    printf("enter the year");  
    scanf("%d",&year);  
    if((year%4==0 && year%100!=0) || year%400==0){
```



```
        printf("leap year");
    }else{
        printf("Not a leap year");
    }
}
```

```
#temperature alert
#include<stdio.h>
int main(){
    int temp;
    printf("enter the temperature");
    scanf("%d",&temp);
    if(temp>40){
        printf("temp exceeded 40 degree!");
    }else{
        printf("normal");
    }
}
```

```
#number divisibility
#include<stdio.h>
int main(){
    int a,b;
    printf("enter 2 numbers");
    scanf("%d%d",&a,&b);
    int result=a%b;
    if (b != 0 && (a / b) * b == a){
```

```
        printf("divisible");
    }else{
        printf("not divisible");
    }
}
```

#student eligibility

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

```
int main(){
    int age,grade;
    printf("enter the student age");
    scanf("%d",&age);
    printf("enter the student grade");
    scanf("%d",&grade);
    if(age>18 && grade>50){
        printf("eligible");
    }else{
        printf("not eligible");
    }
}
```

#valid password length?

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

```
int main(){
    int leng;
    printf("enter the password");
    scanf("%d",&leng);
    if(leng>=8){
```

```
    printf("valid password");  
}else{  
    printf("length is less than 8");  
}  
}
```