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# // Demo Program

#include<stdio.h>

#include<conio.h>

void main()

{

clrscr();

printf("Hello World !");

getch();

}

# // Memory Magt : Sizeof() method

#include<conio.h>

#include<stdio.h>

void main()

{

clrscr();

printf("\n sizeofint= %d",sizeof(int));

printf("\n sizeofchar= %d",sizeof(char));

printf("\n sizeoffloat= %d",sizeof(float));

printf("\n sizeofdouble= %d",sizeof(double));

printf("\n sizeoflong double= %d",sizeof(long double));

printf("\n");

getch();

}

# // Normal Program 1 : Complex Calc

#include<stdio.h>

#include<conio.h>

void main()

{

int a, b, c;

clrscr();

printf("Add the 2 numbers\n");

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

c=a+b;

printf("\nThe sum of the two numbers is\n%d",c);

printf("Subtract the 2 numbers\n");

c=a-b;

printf("\nThe answer is\n%d",c);

printf("\n\nMultiply the 2 numbers\n");

c=a\*b;

printf("\nThe answer is\n%d",c);

printf("\n\nDivide the 2 numbers\n");

c=a/b;

printf("\nThe remainder is\n%d",c);

c=a%b;

printf("\n\nThe mod is\n%d",c);

printf("Square the number\n");

scanf("%d", &a);

b=a\*a;

printf("The product of the squared value is\n%d",b);

getch();

}

# // Normal Program 2: Area & Circumfrence of Circle

#include<stdio.h>

#include<conio.h>

void main()

{

float r,a,c;

clrscr();

printf("\n Enter radius from user");

scanf("%f",&r);

a=3.14\*r\*r;

c=2\*3.14\*r;

printf("\n area of circle=%f",a);

printf("\n circumferenec of circle=%f",c);

getch();

}

# //Normal Program 3: Area & Perimeter Of Rectangle

#include<stdio.h>

#include<conio.h>

void main()

{

int l,b,a,p;

clrscr();

printf("\nenter the length and breadth respectively");

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

a=(l\*b);

p=2\*(l+b);

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

printf("\nperimeter of rectangle=%d",p);

getch();

}

# // Normal Programs 4: Converting from Uppercase to Lowercase

#include<stdio.h>

#include<conio.h>

void main()

{

char var1;

clrscr();

printf("\nenter any character in upper case:");

scanf("%c",&var1);

printf("\ncharacter in lower case=%c",var1+32);

getch();

}

# // Normal Program 5 : Swapping using 3rd Variable

#include<stdio.h>

#include<conio.h>

void main()

{

int a,b,temp;

clrscr();

printf("enter two nos.:");

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

temp=a;

a=b;

b=temp;

printf("after swapping the values are=%d\t%d",b,a);

getch();

}

# // Normal Program 6 : Swapping Without using 3rd Variable

#include<stdio.h>

#include<conio.h>

void main()

{

int a,b;

clrscr();

printf("enter two nos.:");

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

a=a+b;

b=a-b;

a=a-b;

printf("after swapping the values are=%d\t%d",b,a);

getch();

}

# // Normal Program 7 : Conversion Time

#include<stdio.h>

#include<conio.h>

void main()

{

int h,m,s;

clrscr();

printf("enter time in hours=");

scanf("%d",&h);

m=h\*60;

s=m\*60;

printf("\n time in mins are=%d",m);

printf("\n time in secs are=%d",s);

getch();

}

# // Normal Program 8: Temprature in Celsius -> Farehnite

#include<stdio.h>

#include<conio.h>

void main()

{

int c,f;

clrscr();

printf("Enter Temprature in Celcius");

scanf("%d",&c);

f=(9\*c)/5+32;

printf("\nFarehnite amount is:%d",f);

getch();

}

# // Conditional Statement 1 : Check Divisibility

#include<stdio.h>

#include<conio.h>

void main()

{

int a;

clrscr();

printf("enter the no");

scanf("%d",&a);

if(a%3==0 && a%7==0){

printf("the no is divisble by 3 and 7");

}

else{

printf("the no is not divisble ");

}

getch();

}

# // Conditional Statement 2 : Check Even/Odd

#include<stdio.h>

#include<conio.h>

void main()

{

int a;

clrscr();

printf("enter the no=");

scanf("%d",&a);

if(a%2==0){

printf("it is even");

}

else{

printf("it is odd");

}

getch();

}

# // Conditional Statement 3 :Check number is Positive/Negative

#include<stdio.h>

#include<conio.h>

void main()

{

int a;

clrscr();

printf("enter the no=");

scanf("%d",&a);

if(a>0){

printf("the given no is positive");

}

else{

printf("the given no is negative");

}

getch();

}

# // Conditional Statement 4 : Eligibility to Vote

#include<stdio.h>

#include<conio.h>

void main()

{

int age;

clrscr();

printf("\n enter age of person");

scanf("%d",&age);

if(age>18)

{

printf("\n it is alegible for voting");

}

else

{

printf("\n it is not alegible for voting");

}

getch();

}

# // Conditional Statement 5 : Check for Leap Year

#include<stdio.h>

#include<conio.h>

main()

{

int year,rem;

clrscr();

printf("\n enter any year");

scanf("%d", &year);

rem=year%4;

if(rem==0)

{

printf("\n it is leap year");

}

else

{

printf("\n it is not leap year");

}

getch();

}

# // Conditional Statement 6 : Find Greatest of 3

#include<stdio.h>

#include<conio.h>

main()

{

int a,b,c;

clrscr();

printf("enter three numbers");

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

if(a>b && a>c)

{

printf("\na is greatest");

}

else if(b>a && b>c)

{

printf("\n b is greatest");

}

else

{

printf("\n c is greatest");

}

getch();

}

# // Conditional Statement 7 : Grade according to Marks

#include<stdio.h>

#include<conio.h>

void main()

{

float m1,m2,m3,m4,m5,s,avg;

clrscr();

printf("\n Enter any five nos from user");

scanf("%f%f%f%f%f",&m1,&m2,&m3,&m4,&m5);

s=(m1+m2+m3+m4+m5);

avg=s/5;

if(avg<35)

{

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

}

else if(avg>=35 && avg<45)

{

printf("\n 3rd class%f",avg);

}

else if(avg>=45 && avg<60)

{

printf("\n 2nd class%f",avg);

}

else if(avg>=60 && avg<75)

{

printf("\n 1ST class%f",avg);

}

else if(avg>=75 && avg<100)

{

printf("\nTOPPER%f",avg);

}

getch();

}

# // Switch Statement 1 : Calculator

#include<stdio.h>

#include<conio.h>

void main()

{

int n1,n2,res;

int ch;

clrscr();

printf("\nEnter 1 for Add");

printf("\nEnter 2 for Sub");

printf("\nEnter 3 for Mult");

printf("\nEnter 4 for Div");

printf("\nEnter 5 for Remainder");

printf("\nEnter 2 nos.");

scanf("%d%d",&n1,&n2);

printf("\nEnter your choice");

scanf("%d",&ch);

switch(ch)

{

case 1: res=n1+n2;

break;

case 2: res=n1-n2;

break;

case 3: res=n1\*n2;

break;

case 4: res=n1/n2;

break;

case 5: res=n1%n2;

break;

default:

printf("\nInvalid choice");

}

printf("\nResult=%d",res);

getch();

}

# // Switch Statement 2: Digits in Characters

#include<stdio.h>

#include<conio.h>

void main()

{

int n1;

clrscr();

printf("\nEnter any number betwin 0-9:");

scanf("%d",&n1);

switch(n1)

{

case 0:

printf("\tZero");

break;

case 1:

printf("\tOne");

break;

case 2:

printf("\tTwo");

break;

case 3:

printf("\tThree");

break;

case 4:

printf("\tFour");

break;

case 5:

printf("\tFive");

break;

case 6:

printf("\tSix");

break;

case 7:

printf("\tSeven");

break;

case 8:

printf("\tEight");

break;

case 9:

printf("\tNine");

break;

default:

printf("\tinvalid number");

}

getch();

}

# //Looping Construct ( For ) 1 : Find Factorial of a No.

#include<stdio.h>

#include<conio.h>

void main()

{

int n,f=0

clrscr();

printf("enter the number");

scanf("%d",&n);

for(n=n;n>=1;n--)

{

f=f\*n;

}

printf("factorial=%d",f);

getch();

}

# // Looping Construct (FOR) 2 : Check Prime

#include<stdio.h>

#include<conio.h>

void main()

{

int num,i,c=0;

clrscr();

printf("enter the number=");

scanf("%d",&num);

for(i=1;i<=num;i++);

{

if(num%i==0)

{ c=c+1;

}

}

if(c==2)

{

printf("the given number is a prime");

}

getch();

}

# // Looping Construct ( For) 3 : Table of a Number

#include<stdio.h>

#include<conio.h>

void main()

{

int i,num,res=0;

clrscr();

printf("enter the number=");

scanf("%d",&num);

for (i=1;i<=10;i++)

{

res=num\*i;

printf("%d\*%d=%d\n",num,i,res);

}

getch();

}

# // Looping Construct (For) 4 :Pattern 1

#include<stdio.h>

#include<conio.h>

void main()

{

int i,j;

clrscr();

for(i=1;i<=5;i++)

{

for(j=1;j<=i;j++)

{

printf("%d",i);

}

printf("\n");

}

getch();

}

# // Looping Construct (For) 5 : Pattern 2

#include<stdio.h>

#include<conio.h>

main()

{

int i,j;

int ch=65; // A=65,B=66,a=97,b=98,0=48,1=49

clrscr();

for(i=1;i<=5;i++)

{

for(j=1;j<=i;j++)

{

printf("%c",ch);

ch++;

}

printf("\n");

ch=65;

}

getch();

}

# // Looping Construct (For) 6 : Pattern3

#include<stdio.h>

#include<conio.h>

main()

{

int i,j;

clrscr();

for(i=1;i<=5;i++)

{

for(j=1;j<=i;j++)

{

if(j%2!=0)

printf("1");

else

printf("0");

}

printf("\n");

}

getch();

}

# // Looping Construct (While) 7 : Sum of Even Nos. between 1- 10

#include<stdio.h>

#include<conio.h>

void main()

{

int i,s=0;

clrscr();

i=1;

do

{

if(i%2==0)

{

printf("%d\n",i);

s=s+i;

}

i++;

}

while(i<=10);

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

getch();

}

# // Looping Construct (While) 9 : Checking for Armstrong

#include<stdio.h>

#include<conio.h>

#include<math.h>

void main()

{

int num,rem,res=0,a=0,temp;

clrscr();

printf("enter number");

scanf("%d",&num);

temp=num;

while(num!=0)

{

rem=num%10;

//rev=rev\*10+rem;

a=pow(rem,3);

res=res+a;

num=num/10;

}

if(res==temp)

{

printf(" number is armstrong");

}

else

{

printf("not armstrong");

}

getch();

}

# // Looping Construct (While) 10 : Total Vowels & Consonants

#include<stdio.h>

#include<conio.h>

void main()

{

char name[10],ch;

int v=0,c=0,i=0;

printf("enter the name");

scanf("%s",name);

while(name[i]!=NULL)

{

ch=name[i];

if(ch=='a'|| ch=='e'|| ch=='i'|| ch=='o'|| ch=='u')

{

v++;

}

else

{

c++;

}

i++;

}

printf("total no of vowels:%d",v);

printf("total no of const:%d",c);

getch();

}

# // Looping Construct (While) 11 : Check for Palindrome

#include<stdio.h>

#include<conio.h>

main()

{

int num,rem,rev=0,temp;

clrscr();

printf("\nenter the num");

scanf("%d",&num);

temp=num;

while(num>0)

{

rem=num%10;

rev=rev\*10+rem;

num=num/10;

}

if(temp==rev)

printf("\n the num is PALINDROME");

else

printf("\n the num is not palindrome");

getch();

}

# // Single Dimensional Array ( Integer Type ) 1 : Display Array

#include<stdio.h>

#include<conio.h>

void main()

{

int arr[10],i;

clrscr();

printf("Enter 10 values");

for(i=0;i<=9;i++) //input

{

scanf("%d",&arr[i]);

}

for(i=0;i<=9;i++) //output

{

printf("%d\n",arr[i]);

}

getch();

}

# // Single Dimensional Array (Integer Type) 2 : Sum Of Array Elements

#include<stdio.h>

#include<conio.h>

main()

{

int arr[10],i,s=0;

clrscr();

for(i=0;i<=9;i++)

{

printf("\nenter any numbers");

scanf("%d",&arr[i]);

}

for(i=0;i<=9;i++)

{

printf("\n%d",arr[i]);

s=s+arr[i];

}

printf("\n sum of all numbers=%d",s);

getch();

}

# // Single Dimensional Array ( Integer Type ) 3 : Reverse Array

#include<stdio.h>

#include<conio.h>

void main()

{

int arr[10],i;

clrscr();

printf("\nEnter ten numbers:");

for(i=0;i<10;i++)

{

scanf("%d",&arr[i]);

}

for(i=9;i>=0;i--)

{

printf("the reversed nos. are %d\n",arr[i]);

}

getch();

}

# // Single Dimensional Array( Integer Type ) 4 : Find Greatest No.

#include<stdio.h>

#include<conio.h>

void main()

{

int i,arr[10],gt=0;

clrscr();

printf("enter ten nos.");

for(i=10;i<10;i++)

{

scanf("%d",&arr[i]);

}

gt=arr[0];

for(i=0;i<10;i++)

{

if(arr[i]>gt);

{

gt=arr[i];

}

}

printf("greatest no is %d",gt);

getch();

}

# // Single Dimensional Array ( Integer Type) 5 : Sorting Array

#include<stdio.h>

#include<conio.h>

void main()

{

int arr[10],temp=0,i,j;

clrscr();

printf("enter the 10 nos.");

for(i=0;i<10;i++)

{

scanf("%d",&arr[i]);

}

for(i=0;i<10;i++)

{

for(j=i+1;j<10;j++)

{

if(arr[i]>arr[j])

{

temp=arr[i];

arr[i]=arr[j];

arr[j]=temp;

}

}

}

for(i=0;i<10;i++)

{

printf("%d\n",arr[i]);

}

getch();

}

# // Single Dimensional Array ( Integer Type) 6 : Search A No.

#include<stdio.h>

#include<conio.h>

void main()

{

int arr[10],i,s,f=0;

clrscr();

for(i=0;i<=9;i++)

{

printf("\nenter any numbers");

scanf("%d",&arr[i]);

}

printf("\n Enter any search number");

scanf("%d",&s);

for(i=0;i<=9;i++)

{

if(arr[i]==s)

{

f=1;

break;

}

}

if(f==1)

printf("\n number exists");

else

printf("\nnumber does not exist");

getch();

}

# // Single Dimensional Array (Integer Type) 7 : Array Sum of Odd/Even & Avg of Odd/Even

#include<stdio.h>

#include<conio.h>

main()

{

int arr[10],i,sum=0,n=0,sum1=0,n1=0;

float a,a1;

clrscr();

for(i=0;i<=9;i++)

{

printf("\n Enter any number");

scanf("%d",&arr[i]);

}

for(i=0;i<=9;i++)

{

if(arr[i]%2!=0)

{

sum=sum+arr[i];

n++;

}

else

{

sum1=sum1+arr[i];

n1++;

}

}

a=sum/n;

a1=sum1/n1;

printf("\nSum of all odd nos of arr=%d\n\nAvg of odd nos =%f",sum,a);

printf("\nSum of all even nos of arr=%d\n\nAvg of even nos =%f",sum1,a1);

getch();

}

# // Single Dimensional Array ( Character Type ) 1 : Display Name

#include<stdio.h>

#include<conio.h>

void main()

{

char name[20];

clrscr();

printf("Enter name: ");

scanf("%s",name);

printf("Your name is=%s",name);

getch();

}

# // Single Dimensional Array (Character Type) 2 : Reverse Name

#include<stdio.h>

#include<conio.h>

void main()

{

char a,arr[20];

clrscr();

printf("enter any name:");

for(a=0;a<=20;a++)

{

scanf("%c",&arr[a]);

}

for(a=20;a>=0;a--)

{

printf("\nreverse name:%d",arr[a]);

}

getch();

}

# // Single Dimensional Array (Character Type) 3: Search for ch character

#include<stdio.h>

#include<conio.h>

main()

{

char name[20],ch;

int i=0,f=0;

clrscr();

printf("\n enter any name");

scanf("%s",name);

printf("\n enter any single ch");

fflush(stdin);

scanf("%c",&ch);

while (name[i]!=NULL)

{

if (name[i]==ch)

{

f=1;

break;

}

i++;

}

if(f==1)

printf("ch is exist");

else

printf("ch does not exist");

getch();

}

# //Single Dimensional Array (Character Type) 4 : Check Palindrome

#include<stdio.h>

#include<string.h>

#include<conio.h>

main()

{

char name[20];

int i, l,f=0;

clrscr();

printf("Enter any name");

scanf("%s",name);

l=strlen(name);

l--;

for(i=0;i<=l;i++)

{

if(name[i]==name[l])

{ f=1;

}

else

{

f=0;

break;

}

l--;

}

if(f==1)

printf("\nit is pallindrome");

else

printf("\nit is not pallindrome");

getch();

}

# // Double Dimensional Array( Integer Type ) 1 : 5 Students Marks of 4 Subjects

#include<stdio.h>

#include<conio.h>

void main()

{

int arr[5][4],i,j;

printf("Enter 4 sub mks of 5 studs");

for(i=0;i<=4;i++) //input :rows

{ for(j=0;j<=3;j++) //input:cols

{

scanf("%d",&arr[i][j]);

}

}

for(i=0;i<=4;i++) //output:rows

{ for(j=0;j<=3;j++)

{

printf("%d\t",arr[i][j]);

}

printf("\n\n");

}

getch();

}

# // Double Dimensional Array( Integer Type ) 2 : Total Marks of 4 Subjects of 5 Students

#include<stdio.h>

#include<conio.h>

void main()

{

int arr[5][4],i,j,sum,num;

clrscr();

printf("enter the marks of four sub of 5 stdnts");

for(i=0;i<=4;i++)

{

for(j=0;j<=4;j++)

{

scanf("%d",&arr[i][j]);

}

}

for(i=0;i<=3;i++)

{

for(j=0;j<=3;j++)

{

printf("%d\t",&arr[i][j]);

}

}

for(sum=0;sum>=num;sum++)

{

scanf("%d",&sum)

}

printf("the sum of the marks is %d",&sum);

getch();

}

# // Double Dimensional ( Character Type ) 1 : Display Name of 5 Students

#include<stdio.h>

#include<conio.h>

void main()

{

char name[5][20];

int i;

clrscr();

printf("Enter 5 names: ");

for(i=0;i<5;i++)

{

scanf("%s",name[i]);

}

for(i=0;i<5;i++)

{

printf("%dStudent's name is=%s\n",i,name[i]);

}

getch();

}

# // Simple Structure 1 : A Student Details

#include<stdio.h>

#include<conio.h>

struct student{

int rno,age;

char name[25],course[15];

};

void main()

{

struct student ST;

clrscr();

printf("Enter rollno.=");

scanf("%d",&ST.rno);

printf("Enter name=");

scanf("%s",ST.name);

printf("Enter age.=");

scanf("%d",&ST.age);

printf("Enter course=\n");

scanf("%s",ST.course);

printf("\nRoll No=%d",ST.rno);

printf("\nName=%s",ST.name);

printf("\nAge=%d",ST.age);

printf("\nCourse=%s",ST.course);

getch();

}

# // Simple Structure 2 : A Book Details

#include<stdio.h>

#include<conio.h>

struct book

{

int price,edition;

char title[20],name[20];

};

main()

{

struct book b1;

int i;

clrscr();

printf("enter the title");

scanf("%s",b1[i].title);

printf("\nenter the au's name");

scanf("%s",b1[i].name);

printf("\nenter the price");

scanf("%d",&b1[i].price);

printf("\nenter the edition");

scanf("%d",&b1[i].edition);

printf("\ntitle=%s",b1[i].title);

printf("\nau's name=%s",b1[i].name);

printf("\nprice=%d",b1[i].price);

printf("\nedition=%dth",b1[i].edition);

printf("\n");

getch();

}

# //Array Of Structure 1 : No. of Students Details

#include<stdio.h>

#include<conio.h>

struct student{

int rno,age;

char name[25],course[15];

};

void main()

{

struct student ST[3];

int i;

clrscr();

for(i=0;i<=2;i++)

{

printf("Enter rollno.=");

scanf("%d",&ST[i].rno);

printf("Enter name=");

scanf("%s",ST[i].name);

printf("Enter age.=");

scanf("%d",&ST[i].age);

printf("Enter course=\n");

scanf("%s",ST[i].course);

}

for(i=0;i<=2;i++)

{

printf("\n\nStudent =%d",i);

printf("\nRoll No=%d",ST[i].rno);

printf("\nName=%s",ST[i].name);

printf("\nAge=%d",ST[i].age);

printf("\nCourse=%s",ST[i].course);

}

getch();

}

# //Array Of Structure 2 : No. of Books Details

#include<stdio.h>

#include<conio.h>

struct book{

int id,edition,price;

char bname[30], name[25];

};

void main()

{

struct book sb[3];

int i;

clrscr();

for(i=0;i<=2;i++)

{

printf("enter book name=");

scanf("%s",sb[i]. bname);

printf("enter id no=");

scanf("%d",&sb[i]. id);

printf("enter eddition=");

scanf("%d",&sb[i]. edition);

printf("enter price=");

scanf("%d",&sb[i]. price);

printf("enter author name=");

scanf("%s",sb[i]. name);

}

for(i=0;i<=2;i++)

{

printf("\n\n bname=%s",sb[i]. bname);

printf("\n id=%d",sb[i]. id);

printf("\n edition=%d",sb[i]. edition);

printf("\n price=%d",sb[i]. price);

printf("\n author name=%s",sb[i].name);

}

getch();

}

# //Nested Structure 1 : Student Details with extra fields

#include<stdio.h>

#include<conio.h>

struct student{

int rno,age;

char name[25],course[15];

};

struct student\_det {

long int phone;

char address[50];

struct student ST;

};

void main()

{

struct student\_det SD;

clrscr();

printf("Enter rollno.=");

scanf("%d",&SD.ST.rno);

printf("Enter name=");

scanf("%s",SD.ST.name);

printf("Enter age.=");

scanf("%d",&SD.ST.age);

printf("Enter course=");

scanf("%s",SD.ST.course);

printf("Enter phone no.=");

scanf("%ld",&SD.phone);

printf("Enter address=");

scanf("%s",SD.address);

printf("\n\nRoll No=%d",SD.ST.rno);

printf("\nName=%s",SD.ST.name);

printf("\nAge=%d",SD.ST.age);

printf("\nCourse=%s",SD.ST.course);

printf("\nPhone=%ld",SD.phone);

printf("\nAddress=%s",SD.address);

getch();

}

# // Nested Structure 2 : Account Details with extra fields

#include<stdio.h>

#include<conio.h>

struct customer{

int id,balance;

char acc\_holder\_name[50],acc\_type[30];

};

struct customer\_detail{

long int acc\_no;

char address[30];

struct customer SC;

};

void main()

{

struct customer\_detail CD;

clrscr();

printf("enter acc id=");

scanf("%d",&CD.SC.id);

printf("enter balance=");

scanf("%d",&CD.SC.balance);

printf("enter acc holder name=");

scanf("%s",CD.SC.acc\_holder\_name);

printf("enter acc type =");

scanf("%d",&CD.SC.acc\_type);

printf("enter acc no=");

scanf("%d",&CD.acc\_no);

printf("enter address=");

scanf("%s",CD.address);

printf("\n\n acc id=%d",CD.SC.id);

printf("\n balance=%d",CD.SC.balance);

printf("\n acc holder name=%s",CD.SC.acc\_holder\_name);

printf("\n acc type=%d",CD.SC.acc\_type);

printf("\n acc no=%d",CD.acc\_no);

printf("\n address=%s",CD.address);

getch();

}

# // Simple Union 1 : Student Details

#include<stdio.h>

#include<conio.h>

union student{

int rno;

char name[20];

};

void main()

{

union student s1;

clrscr();

printf("Enter rollno=");

scanf("%d",&s1.rno);

printf("Enter name=");

scanf("%s",s1.name);

printf("\nRoll no=%d",s1.rno);

printf("\nName=%s",s1.name);

getch();

}

# // Nested Union 2 : Student Extra Details

#include<stdio.h>

#include<conio.h>

union student{

int rno;

char name[20];

};

union stud\_det{

int age;

char batch[25];

union student s1;

};

void main()

{

union stud\_det sd;

clrscr();

printf("Enter rollno=");

scanf("%d",&sd.s1.rno);

printf("Enter name=");

scanf("%s",sd.s1.name);

printf("Enter age=");

scanf("%d",&sd.age);

printf("Enter batch=");

scanf("%s",sd.batch);

printf("\nRoll no=%d",sd.s1.rno);

printf("\nName=%s",sd.s1.name);

printf("\nAge=%d",sd.age);

printf("\nBatch=%s",sd.batch);

getch();

}

# // Function 1 : Divisibility & Even Odd

#include<stdio.h>

#include<conio.h>

void eo(int);

void div(int); //declaration of fun

void main()

{ int n;

clrscr();

printf("\nEnter any number=");

scanf("%d",&n);

div(n);

eo(n); // calling of fun

getch();

}

void div(int n) //definition of fun

{

if(n%3==0&&n%7==0)

printf("\nIt is divisible by 3 and 7");

else

printf("\nIt is not divisible by 3 and 7");

}

void eo(int n)

{

if(n%2==0)

printf("it is an even no.");

else

printf("it is an odd no.");

}

# // Function 2: Factorial & Square Root of a Number

#include<stdio.h>

#include<conio.h>

#include<math.h>

void fact(int);

void sqr(int);

void main()

{

long int n;

clrscr();

printf("enter any number=");

scanf("%d",&n);

fact(n);

sqr(n);

getch();

}

void fact(int n)

{

long int i,f=1;

for(i=n;i>=1;i--)

{

f=f\*i;

}

printf("\nfactorial=%ld",f);

}

void sqr(int n)

{

int res;

res=sqrt(n);

printf("\nthe sqrt = %d",res);

}

# //Function 3 : Table & Prime

#include<stdio.h>

#include<conio.h>

void table(int);

void prime(int);

void main()

{

int n;

clrscr();

printf("\n enter any number=");

scanf("%d",&n);

table(n);

prime(n);

getch();

}

void table(int n)

{

int res,i;

for(i=1;i<=10;i++)

{

res=n\*i;

printf("%d\*%d=%d\n",n,i,res);

}

}

void prime(int n)

{

int c=0,i;

for(i=1;i<=n;i++)

{

if(n%i==0)

{ c++;}

}

if(c==2)

{

printf("it is prime");

}

else

{

printf("it is not a prime no");

}

}

# // Function 4 : Fibonacci Series

#include<stdio.h>

#include<conio.h>

void fibo(int);

void main()

{

int num;

clrscr();

printf("enter no. of elements");

scanf("%d",&num);

fibo(num);

getch();

}

void fibo(int n)

{

int a=1,b=1,c,i;

for(i=0;i<n;i++)

{

printf("%d \t",a);

c=a+b;

a=b;

b=c;

}

}

# // Function 5 : Palindrome

#include<stdio.h>

#include<conio.h>

void rev(int);

main()

{

int num;

clrscr();

printf("enter the num");

scanf("%d",&num);

rev(num);

}

void rev(int num)

{

int a=0,revr=0,rem;

a=num;

while(num!=0)

{

rem=num%10;

revr=revr\*10+rem;

num=num/10;

}

if(a==revr)

printf("\n the num is PALINDROME");

else

printf("\n the num is not palindrome");

getch();

}

# // Pointer ( Integer Type) 1 : Display Pointer Array Elements

#include<stdio.h>

#include<conio.h>

void main()

{

int arr[10],i;

int \*ptr;

clrscr();

for(i=0;i<=9;i++)

{

printf("\n Enter any number");

scanf("%d",&arr[i]);

}

ptr=&arr[0];

for(i=0;i<=9;i++)

{

printf("\n%d",\*(ptr+i));

}

getch();

}

# // Pointer (Integer Type) 2 : Sum of Array elements

#include<stdio.h>

#include<conio.h>

void main()

{

int arr[10],i,s=0;

int \*ptr;

clrscr();

for(i=0;i<=9;i++)

{

printf("\n Enter any number");

scanf("%d",&arr[i]);

}

ptr=&arr[0];

for(i=0;i<=9;i++)

{

printf("\n%d",\*(ptr+i));

s=s+(\*(ptr+i));

}

printf("\n sum of all numbers=%d",s);

getch();

}

# // Pointer ( Integer Type) 3 : Factorial of a Number

#include<stdio.h>

#include<conio.h>

void main()

{

int num,i,f=1;

int \*ptr;

clrscr();

printf("Enter any value");

scanf("%d",&num);

ptr=&num; //num :address(1001) ->ptr (1001)

for(i=\*ptr;i>=1;i--) // num :value(5) -> \*ptr (5)

{

f=f\*i;

}

printf("Factorial=%d",f);

getch();

}

# // Pointer ( Character Type) 4 : Display Name

#include<stdio.h>

#include<conio.h>

void main()

{

char l,i;

char name;

char \*ptr;

printf("enter any name=");

scanf("%d",name);

ptr=&name;

l=strlen(\*ptr);

for(i=0;i<l;i++)

{

printf("%c",name[i]);

}

getch();

}

# // Pointer (Character Type) 5 : Reverse Name

#include<stdio.h>

#include<conio.h>

void main()

{

char name[30];

char \*ptr1,\*ptr2;

clrscr();

printf("\n Enter your name=");

scanf("%s",name);

ptr1=name;

ptr2=name;

printf("\n Your name in reverse order=");

while(\*ptr1!=NULL) //length

{

ptr1++;

}

ptr1--;

while(ptr1>=ptr2)

{

printf("%c",\*ptr1);

ptr1--;

}

getch();

}

# // File Handling 1 : Reading a Particular .txt File

#include<stdio.h>

#include<conio.h>

void main()

{

FILE \*ptr;

char file1[30],ch;

clrscr();

printf("Enter any file name to read");

scanf("%s",file1);

ptr=fopen(file1,"r");

if(ptr==NULL)

{

printf("\n File not found");

}

else

{

while(!feof(ptr))

{

ch=getc(ptr);

printf("%c",ch);

}

fclose(ptr);

printf("\nData Read Successfully");

}

getch();

}

# // File Handling 2 : Reading a Particular .txt File1 & Writing its contents to File2

#include<stdio.h>

#include<conio.h>

void main()

{

FILE \*ptr1,\*ptr2;

char file1[30],file2[30],ch;

clrscr();

printf("Enter any 2 file names to read and write");

scanf("%s",file1);

scanf("%s",file2);

ptr1=fopen(file1,"r");

ptr2=fopen(file2,"w");

if(ptr1==NULL)

{

printf("\n File not found");

}

else

{

while(!feof(ptr1))

{

ch=getc(ptr1);

putc(ch,ptr2);

}

fclose(ptr1);

fclose(ptr2);

printf("\nData Read & Wrote Successfully");

}

getch();

}

# // File Handling 3 : Reading a Particular .txt File1 & Appending its contents to File2

#include<stdio.h>

#include<conio.h>

void main()

{

FILE \*ptr1,\*ptr2;

char file1[30],file2[30],ch;

clrscr();

printf("Enter any 2 file names to read and append");

scanf("%s",file1);

scanf("%s",file2);

ptr1=fopen(file1,"r");

ptr2=fopen(file2,"a");

if(ptr1==NULL)

{

printf("\n File not found");

}

else

{

while(!feof(ptr1))

{

ch=getc(ptr1);

putc(ch,ptr2);

}

fclose(ptr1);

fclose(ptr2);

printf("\nData Read & Appended Successfully");

}

getch();

}

# // Call By Value

#include<stdio.h>

#include<conio.h>

void calbyval(int);

void calbyref(int\*);

void main()

{

int num;

clrscr();

printf("\nenter any number:");

scanf("%d",&num);

printf("\nyou initial valur is=%d",num);

printf("\ncall by value");

calbyval(num);

printf("\nyour value after calling is=%d",num);

printf("\ncall by ref");

calbyref(&num);

printf("\nyour value after calling is=%d",num);

getch();

}

void calbyval(int num)

{

printf("\nyour number of fun is=%d",num);

num=num+10;

printf("\nyour no after addition is=%d",num);

}

void calbyref(int \*num)

{

printf("\nyour no of fun is=%d",\*num);

\*num=\*num+10;

printf("\nyour number after addition is =%d",\*num);

}

# // Call By Refrence

#include<stdio.h>

#include<conio.h>

void calbyref(int\*);

void main()

{

int num;

clrscr();

printf("\nenter any number:");

scanf("%d",&num);

printf("\nyou initial valur is=%d",num);

calbyref(&num);

printf("\nyour value after calling is=%d",num);

getch();

}

void calbyref(int\*num)

{

printf("\nyour no of fun is=%d",\*num);

\*num=\*num+10;

printf("\nyour number after addition is =%d",\*num);

}

# // Macro 1: Object Like Macro

#include<stdio.h>

#include<conio.h>

#define PI 3.14

void main()

{

float r,ac,cc;

clrscr();

printf("\n Enter any radius=");

scanf("%f",&r);

ac=PI\*r\*r;

cc=2\*PI\*r;

printf("\n Area of Circle=%f",ac);

printf("\n Circumference of Circle=%f", cc);

getch();

}

# // Macro 2: Function Like Macro

#include<stdio.h>

#include<conio.h>

#define A 200

#define B 300

void main()

{

clrscr();

if(A>B)

printf("\n A>B");

else

printf("\n B>A");

getch();

}

# // Macro 3: Function Like Macro

#include<stdio.h>

#include<conio.h>

#define A 200

#define B 300

void main()

{

int max;

clrscr();

max=A>B?A:B;

printf("\n Max Value is=%d",max);

getch();

}