ASSIGNMENT 1

**Program 1:**

#include<stdio.h>

#include<conio.h>

void main()

{

printf("Welcome to C-DAC Kharghar.....\nAlways remember:The Harder you work for something, the greater you'll feel when you achieve it....");

getch();}

**Program 2:**

#include<stdio.h>

#include<conio.h>

void main()

{

clrscr();

printf("Size Of \n Int %d\n Float %d\n Double %d\n Char %d", sizeof(int),sizeof(float),sizeof(double),sizeof(char));

getch();

}

**Program 3:**

#include<stdio.h>

#include<conio.h>

void main()

{

clrscr();

int num;

printf("Enter NUmber: ");

scanf("%d",&num);

if(num>0)

{

printf("%d Number is Positive",num);

}

else

{

printf("%d Number is Negative",num);

}

getch();

}

**PROGRAM 4:**

#include<conio.h>

#include<stdio.h>

void main()

{

int num1,num2,num3;

clrscr();

printf("Enter Three Numbers: ");

scanf("%d\n%d\n%d",&num1,&num2,&num3);

if(num1>num2)

{

if(num1>num3)

{

printf("%d Number is greater",num1);

}

else

{

printf("%d Number is greater",num3);

}

}

else

{

if(num2>num3)

{

printf("%d Number is greater",num2);

}

else

{

printf("%d Number is greater",num3);

}

}

getch();

}

**PROGRAM 5:**

#include<stdio.h>

#include<conio.h>

void main()

{

int num;

clrscr();

printf("Enter Number:");

scanf("%d",&num);

if(num%2==0)

{

printf("%d is an EVEN Number",num);

}

else

{

printf("%d is ODD Number",num);

}

getch();

}

**PROGRAM 6:**

#include<conio.h>

#include<stdio.h>

void main()

{

int num1=0,num2=1,newnum,n,i;

clrscr();

printf("Enter number to print given range of fibonacii series: ");

scanf("%d",&n);

printf("0\n1\n");

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

{

newnum=num1+num2;

printf("%d",newnum);

num1=num2;

num2=newnum;

printf("\n");

}

getch();

}

**PROGRAM 7:**

#include<conio.h>

#include<stdio.h>

void main()

{

int num1=0,num2=1,newnum,n,i;

clrscr();

printf("Enter number to print given range of fibonacii series: ");

scanf("%d",&n);

printf("0\n1\n");

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

{

newnum=num1+num2;

printf("%d",newnum);

num1=num2;

num2=newnum;

printf("\n");

}

getch();

}

**PROGRAM 8:**

#include<conio.h>

#include<stdio.h>

void main()

{

int num,temp,digit=0,new=0;

clrscr();

printf("Enter Number to Check it is armstrong number : ");

scanf("%d",&num);

temp=num;

while(num!=0)

{

new=num%10;

digit=(digit+new\*new\*new);

num/=10;

}

if(digit==temp)

{

printf("\n\%d is an ARMSTRONG Number",temp);

}

else

{

printf("%d is Not an ARMSTRONG Number",temp);

}

getch();

}

**PROGRAM 9:**

#include<conio.h>

#include<stdio.h>

void main()

{

int num,reverse=0,remainder=0;

clrscr();

printf("Enter number to print the reverse of a given number");

scanf("%d",&num);

while(num!=0)

{

remainder=num%10;

reverse=reverse\*10+ remainder;

num/=10;

}

printf("The reverse number is : %d",reverse);

getch();

}

**PROGRAM10 :**

#include<conio.h>

#include<stdio.h>

void main()

{

int num, rev=0,remain,temp=0;

clrscr();

printf("Enter Number to check whether it is palindrome or not");

scanf("%d",&num);

temp=num;

while(num!=0)

{

remain=num%10;

rev=rev\*10+remain;

num/=10;

}

if(temp==rev)

{

printf("%d is an palindrome number",rev);

}

else

{

printf("%d is not an palindrome number",rev);

}

getch();

}

**PROGRAM 11:**

#include<stdio.h>

int main(){

int num, rem, reverse\_num, temp, start, end;

printf("Enter the lower limit: ");

scanf("%d",&start);

printf("Enter the upper limit: ");

scanf("%d",&end);

printf("Palindrome numbers between %d and %d are: ",start,end);

for(num=start;num<=end;num++){

temp=num;

reverse\_num=0;

while(temp){

rem=temp%10;

temp=temp/10;

reverse\_num=reverse\_num\*10+rem;

}

if(num==reverse\_num)

printf("%d ",num);

}

return 0;

}

**PROGRAM 12:**

#include<conio.h>

#include<stdio.h>

void main()

{

char ch;

clrscr();

printf("Enter a Character: ");

scanf("%c",&ch);

printf("The ASCII value of the given character is: %d",ch);

getch();

}

**PROGRAM 13 :**

#include<conio.h>

#include<stdio.h>

void main()

{

int facto=1,num,i=1;

clrscr();

printf("Enter Number:");

scanf("%d\n",&num);

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

{

facto=facto\*i;

}

printf("The factorial of given number is %d :",facto);

getch();

}

**PROGRAM 14:**

#include<conio.h>

#include<stdio.h>

void main()

{

int ch;

clrscr();

printf("Enter Character : ");

scanf("%c",&c);

if(ch=='a'||ch=='e'||ch=='i'||ch=='o'||ch=='u' || ch=='A'||ch=='E'||ch=='I'||ch=='O'||ch=='U')

printf("%c is VOWELS",ch);

else

printf("%c is not an vowels",ch);

getch();

}

**PROGRAM 15:**

#include<stdio.h>

#include<conio.h>

void main()

{

int year;

clrscr();

printf("Enter a Year to check whether it is leap year or not: ");

scanf("%d",&year);

if(year%4==0 || year%400==0 & year%100==0)

{

printf("The %d is leap year: ",year);

}

else

{

printf("The %d is not an leap year",year);

}

getch();

}

**PROGRAM 16 :**

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,sum=0;

clrscr();

printf("Enter the number to find sum of 1st n natural numbers",&n);

scanf("%d",&n);

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

{

sum=sum+i;

}

printf("The sum of first %d natural numbers is : %d",n,sum);

getch();

}

**PROGRAM 17:**

#include<stdio.h>

#include<conio.h>

void main()

{

int x,y;

clrscr();

printf("x=");

scanf("%d",&x);

printf("y=");

scanf("%d",&y);

x=x+y;

y=x-y;

x=x-y;

printf("after swapping %d\t %d",x,y);

getch();

}

**PROGRAM 18:**

#include<conio.h>

#include<stdio.h>

void main()

{

char ch;

clrscr();

printf("Enter Character : ");

scanf("%c",&ch);

if(ch=='a'||ch=='e'||ch=='i'||ch=='o'||ch=='u' || ch=='A'||ch=='E'||ch=='I'||ch=='O'||ch=='U')

printf("%c is VOWELS",ch);

else

printf("%c is CONSONANT",ch);

getch();

}

**PROGRAM 19:**

#include<conio.h>

#include<stdio.h>

void main()

{

int num1,num2,opt;

clrscr();

printf("Enter first integer:");

scanf("%d",&num1);

printf("Enter first integer:");

scanf("%d",&num1);

printf("1.ADDITION\n 2.SUBSTRACTION\n3.MULTIFLICATION\n4.DIVISION\n5.EXIT");

printf("Enter your choice: ");

scanf("%d",&opt);

switch(opt)

{

case 1: printf("Addition of %d and %d is %d",num1,num2,num1+num2);

break;

case 2:printf("Substraction of %d and %d is %d",num1,num2,num1-num2);

break;

caseb 3:printf("Multiflication of %d and %d is %d",num1,num2,num1\*num2);

case 4: if(num2==0)

{

printf("second integer is zero");

}

else

{

printf("Division of %d and %d is %d",num1,num2,num1/num2);

}

break;

case 5: break;

default: printf("incorrect input");

break;

}

getch();

}

**PROGRAM 20:**

#include<stdio.h>

#include<conio.h>

void main()

{

float fare,cel;

clrscr();

printf("Enter temperature is fareihait:");

scanf("%f",&fare);

cel=(fare-32)/1.8;

printf("Temperature in celsius= %f",cel);

getch();

}