**PRACTICAL ASSIGNMENT**

**Global College of Management**

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Morning Shift

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SEQUENCE

Program to find area of a rectangle

#include<stdio.h>

#include<conio.h>

void main()

{

int length, breadth;

clrscr();

printf(“ Enter length of a rectangle : ”);

scanf(“%d”,&length);

printf(“ Enter breadth of the rectangle : ”);

scanf(“%d”,&breadth);

printf(“ Area = %d”,area);

getch();

}

Program to calculate simple interest

#include<stdio.h>

#include<conio.h>

void main()

{

float p, t, r, si;

clrscr();

printf(“ Principle : “);

scanf(“%f”,&p);

printf(“ Time : ”);

scanf(“%f”,&t);

printf(“ Rate : ”);

scanf(“%f”,&r);

si=(p\*t\*r)/100;

printf(“ Simple Interest = %f”,si);

getch();

}

Program to convert Celsius into Fahrenheit

#include<stdio.h>

#include<conio.h>

void main()

{

float cel, fah;

clrscr();

printf(“ Temperature in Celsius : ”);

scanf(“%f”,&cel);

fah=1.8\*cel+32;

printf(“ Temperature in Fahrenheit = %f”,fah);

getch();

}

Program to convert US dollar into Nepali rupee

#include<stdio.h>

#include<conio.h>

void main()

{

float usd, nep;

clrscr();

printf(“ US dollar amount : ”);

scanf(“%f”,&usd);

nep=usd\*102;

printf(“ Currency in Nepali rupee = %f”,nep);

getch();

}

LOOPING STATEMENT

Program to print multiplication table of 5(for loop)

#include<stdio.h>

#include<conio.h>

void main()

{

int i;

clrscr();

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

{

printf(“ %d\n”,i\*5);

}

getch();

}

Program to print multiplication of ‘n’(for loop)

#include<stdio.h>

#include<conio.h>

void main()

{

int n, i;

clrscr();

printf(“ Enter number : ”);

scanf(“%d”,&n);

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

{

printf(“%d\n”,n\*i);

}

getch();

}

Program to print multiplication table of 5(while loop)

#include<stdio.h>

#include<conio.h>

void main()

{

int i=1;

clrscr();

while(i<=10)

{

printf(“%d\n”,i\*5);

i=i+1;

}

getch();

}

Program to print multiplication table of ‘n’(while loop)

#include<stdio.h>

#include<conio.h>

void main()

{

int n, i=1;

clrscr();

printf(“ Enter number : ”);

scanf(“%d”,&n);

while(i<=10)

{

printf(”%d\n”,i\*n);

i=i+1;

}

getch();

}

Program to print multiplication table of 5(do while loop)

#include<stdio.h>

#include<conio.h>

void main()

{

int i=1;

clrscr();

do

{

printf(“%d\n”,i\*5);

i=i+1;

}while(i<=10);

getch();

}

Program to print multiplication table of ‘n’(do while loop)

#include<stdio.h>

#include<conio.h>

void main()

{

int n, i=1;

printf(“ Enter number : ”);

scanf(“%d”,&n);

do

{

printf(“%d\n”,i\*n);

i=i+1;

}while(i<=10);

clrscr();

getch();

}

BRANCHING STATEMENT

Program to check if a person is eligible to vote or not

#include<stdio.h>

#include<conio.h>

void main()

{

int age;

clrscr();

printf(“ Enter your age : ”);

scanf(“%d”,&age);

if(age>=18)

{

printf(“ You are eligible to vote.”);

{

else

{

printf(“ You are ineligible to vote.”);

}

getch();

}

Program to read two integer and perform calculation

#include<stdio.h>

#include<conio.h>

void main()

{

int ch;

float a, b;

clrscr();

printf(“ Enter a number : ”);

scanf(“%d”,&a);

printf(“ Enter another number : ”);

scanf(“%d”,&b);

printf(“1. Addition\n2. Subtraction\n3. Multiplication\n4. Division\n”);

printf(“Choice(1-4) : ”);

scanf(“%d”,&ch);

switch(ch)

{

case 1:

printf(“ Sum = %d”,a+b);

break;

case 2:

printf(“ Difference = %d”,a-b);

break;

case 3:

printf(“ Product = %d”,a\*b);

break;

case 4:

printf(“ Division = %d”,a/b);

break;

default:

printf(“ Invalid option !!!”)

}

getch();

}

Program to find the greatest among three numbers

#include<stdio.h>

#include<conio.h>

void main()

{

int a, b, c;

clrscr();

printf(“ Enter number a : ”);

scanf(“%d”,&a);

printf(“ Enter number b : ”);

scanf(“%d”,&b);

printf(“ Enter number c : ”);

scanf(“%d”,&c);

printf(“ Greatest number = ”);

if(a>b&&a>c)

printf(“%d”,a);

else if(b>c)

Printf(“%d”,b);

else

printf(“%d”,c);

getch();

}

Program to check whether a student is pass or fail

#include<stdio.h>

#include<conio.h>

void main()

{

int eng, comp, math;

clrscr();

printf(“ Enter marks in English Computer Math : ”);

scanf(“%f%f%f”,&eng,&comp,&math);

if(eng>=40&&comp>=40&&math>=40)

printf(“ Pass.”);

else

printf(“ Fail.”);

getch();

}

Program to check whether the given number is odd or even

#include<stdio.h>

#include<conio.h>

void main()

{

int num;

clrscr();

printf(“ Enter a number : ”);

if(n%2==0)

printf(“ Even number.”);

else

printf(“ Odd number.”);

getch();

}

FUNCTION

Program to find area of a rectangle

#include<stdio.h>

#include<conio.h>

int area(int, int);

int area(int length, int breadth)

{

return(length\*breadth);

}

void main()

{

int length, breadth;

clrscr();

printf(“ Length of a rectangle : ”);

scanf(“%d”,&length);

printf(“ Breadth of the rectangle : ”);

scanf(“%d”,&breadth);

printf(“ Area = %d”,area(length,breadth));

getch();

}

Program to find the simple interest

#include<stdio.h>

#include<conio.h>

float si(float, float, float);

float si(float p, float t, float r)

{

return((p\*t\*r)/100);

}

void main()

{

float p, t, r;

clrscr();

printf(“ Enter principle : ”);

scanf(“%f”,&p);

printf(“ Enter time : ”);

scanf(“%f”,&t);

printf(“ Enter rate : ”);

scanf(“%f”,&r);

printf(“ Simple Interest = %f”,si(p, t, r));

getch();

}

Program to find the greatest among 3 numbers

#include<stdio.h>

#include<conio.h>

int findg(int, int, int);

int findg(int a, int b, int c)

{

if(a>b&&a>c)

return(a);

else if(b>c)

return(b);

else

return(c);

}

void main()

{

int a, b, c;

clrscr();

printf(“ Enter three number a b c : ”);;

scanf(“%d%d%d”,&a,&b,&c);

printf(“ Greatest number = %d”,findg(a, b, c));

getch();

}

RECURSION

Program to find the factorial using recursion

#include<stdio.h>

#include<conio.h>

int fact(int);

int fact(int n)

{

if(n<=1)

return(0);

else

return(fact\*fact(n-1));

}

void main()

{

int n;

clrscr();

printf(“ Enter a number : ”);

scanf(“%d”,&n);

printf(“ Factorial = %d”,fact(n));

getch();

}

Program to add two 3X3 matrices

#include<stdio.h>

#include<conio.h>

void main()

{

int a[3][3], b[3][3], i, j;

clrscr();

for(i=1;i<=3;i++)

{

for(j=1;j<=3;j++)

{

printf(“ Matrix A[%d][%d] : ”,i, j);

scanf(“%d”,a[i][j]);

}

}

for(i=1;i<=3;i++)

{

for(j=1;j<=3;j<++)

{

printf(“ Matrix B[%d][%d] : ”,i, j);

scanf(“%d”,b[i][j]);

}

}

for(i=1;i<=3;i++)

{

for(j=1;j<=3;j++)

{

printf(“%d”a[i][j]+b[i][j]);

}

printf(“\n”);

}

getch();

}

STRUCTURE

Program to input roll, full name and total mark

#include<conio.h>

#include<stdio.h>

struct student

{

int roll;

float t;

char fn[15], ln[15];

}s;

void main()

{

clrscr();

printf(“ Roll No : ”);

scanf(“%d”, &s.roll);

printf(“ Full Name : ”);

scanf(“%s%s”, s.fn,s.ln);

printf(“ Total Marks : ”);

scanf(“%f”, &s.t);

printf(“\nRoll = %d\nFull Name = %s %s\nTotal = %f”, s.roll, s.fn, s.ln, s.t);

getch();

}

Program to calculate simple interest

#include<conio.h>

#include<stdio.h>

struct simplei

{

float p, t, r, si;

}calc;

void main()

{

clrscr();

printf(“ Enter Principle : ”);

scanf(“%f”, &calc.p);

printf(“ Enter Time : ”);

scanf(“%f”, &calc.t);

printf(“ Enter Rate : ”);

scanf(“%f”, &calc.r);

calc.si=(calc.t\*calc.t\*calc.r)/100;

printf(“ Simple Interest = %f”, calc.si);

getch();

}

Program to input roll, full name and total mark of 5 students

#include<conio.h>

#include<stdio.h>

struct student

{

int r;

char fn[15], ln[15];

float t;

}s[5];

void main()

{

int r;

clrscr();

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

{

printf(“ Enter Roll : ”);

scanf(“%d”, &s[i].r);

printf(“ Enter Full Name : ”);

scanf(“%s%s”, s[i].fn, s[i].ln);

printf(“ Enter Total Marks : ”);

scanf(“%f”, s[i].t);

}

getch();

}

FILE HANDLING

Program to record name, roll and total of a student in ‘record.dat’ file

#include<stdio.h>

#include<conio.h>

void main()

{

FILE \*p;

char name[20];

int roll;

float total;

p=fopen(“record.dat”,“w”);

printf(“ Name : ”);

scanf(“%s”,name);

printf(“ Roll : ”);

scanf(“%d”,&roll);

printf(“ Total Marks : ”);;

scanf(“%f”,&total);

fprintf(p,“%s\t%d\t%f”,name,roll,total);

fclose(p);

getch();

}

Program to display name, roll and total from ‘record.dat’ file

#include<conio.h>

#include<stdio.h>

void main()

{

FILE \*p;

char name[20];

int roll;

float total;

while(fscanf(p,“%s%d%f”,name,&roll,&total)!=EOF)

{

printf(“%s\t%d\t%f\n”,name,roll,total);

}

fclose(p);

getch();

}

Program to record employee id, name and salary in ‘emp.dat’

#include<stdio.h>

#include<conio.h>

void main()

{

FILE \*e;

int empid;

char name[20];

float salary;

e=fopen(“emp.dat”,“w”);

printf(“ Employee Id : ”);

scanf(“%d”,&empid);

printf(“ Name : ”);

scanf(“%s”,name);

printf(“ Salary : ”);

scanf(“%f”,&salary);

fprintf(e,“%d\t%s\t%f”,empid,name,salary);

fclose(e);

getch();

}

Program to display all roll, name and total from ‘std.dat’ file

#include<conio.h>

#include<stdio.h>

void main()

{

FILE \*emp;

int roll;

char name[20];

float total;

emp=fopen(“std.dat”,“r”);

while(fscanf(emp,“%d%s%f”,&roll,name,&total)!=EOF)

{

printf(“%d\t%s\t%f”,roll,name,total);

}

fclose(emp);

getch();

}