**PROGRAMMING FUNDAMENTAL (Programs)**

**Program #1: vowel Character(using SWITCH)**

**#include<stdio.h> pritntf(“You Enter a vowel characters:\n\n”);**

**#include<conio.h> break;**

**main() default:**

**{ printf(“You Enter A In valid Characters:\n”);**

**char a; }**

**printf("Enter Character:"); return 0;**

**scanf("%c",&a); }**

**switch(a)**

**{**

**case 'a':**

**case 'A':**

**printf("You Enter A Vowel character:");**

**break;**

**case 'e':**

**case 'E':**

**printf("You Enter A Vowel character:\n\n");**

**break;**

**case 'i':**

**case 'I':**

**printf("You Enter A Vowel character:\n\n");**

**break;**

**case 'o':**

**case 'O':**

**printf("You Enter A Vowel character:\n\n");**

**break;**

**case 'u':**

**case 'U':**

**program #2: Factorial (Using WHILE) , program #3: Series(1,5,25,625)**

**(using WHILE LOOP)**

**#include<stdio.h> #include<stdio.h>**

**#include<conio.h> #include<conio.h>**

**main() main()**

**{ {**

**int no1,co1,f1; int a,b;**

**co1=1; a=1;**

**f1=1; while(a<=125)**

**printf("Enter a Number:\n"); {**

**scanf("%d",&no1); a=a\*5;**

**while(co1<=no1) printf(“%d\n”,a);**

**{ }**

**f1=f1\*co1; return 0;**

**co1++; }**

**}**

**printf("Factorial of %d is %d",no1,f1);**

**return 0;**

**}**

**Program #4: First 5 Number Square(using WHILE LOOP)**

**#include<stdio.h> }**

**#include<conio.h> return 0;**

**main() }**

**{**

**int n;**

**n=1;**

**while(n<=5)**

**{**

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

**n=n+1;**

**program # 5: Create a any Table any Integar Number**

**(using WHILE LOOP)**

**#include<stdio.h>**

**#include<conio.h>**

**main()**

**{**

**int n,c;**

**n=1;**

**printf("Enter Any Constant Number:\n");**

**scanf("%d",&c);**

**while(n<=10)**

**{**

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

**n++;**

**}**

**return 0;**

**}**

**Program #6: Odd Number (Using WHILE LOOP)**

**#include<stdio.h> printf(“%d\n”,n);**

**#include<conio.h> n++;**

**main() }**

**{ return 0;**

**int n; }**

**n=1;**

**int r;**

**printf("Enter The Range:");**

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

**while(n<=r)**

**{**

**if(n %2 !=0)**

**program #7:**

**series (1,4,7,10,13,16,19)(using DO WHILE LOOP)**

**#include<stdio.h>**

**#include<conio.h>**

**main()**

**{**

**int n;**

**n=1;**

**int r;**

**printf("Enter The Range :");**

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

**do**

**{**

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

**n=n+3;**

**}while(n<=r);**

**return 0;**

**}**

**Program #8: odd Number (using DO while LOOP)**

**#include<stdio.h> if(n%2!=0)**

**#include<conio.h> printf(“%d\n”,n);**

**main() n++;**

**{ }**

**int n; while(n<=r);**

**int r; return 0;**

**n=1; }**

**printf("Enter The Range:");**

**scanf("%d",r);**

**do**

**{**

**Program #8: Program #9:**

**Even Number (using DO WHILE LOOP), ,Pattern Program \*\*\*\*\***

**#include<stdio.h> \*\*\*\***

**#include<conio.h> \*\*\***

**main() \*\***

**{ \***

**int n=1; #include<stdio.h>**

**int range; #include<conio.h>**

**printf("Enter the Range:"); main()**

**scanf("%d",&range); {**

**do int r,c,rc;**

**{ for(r=5;r>=1;r++)**

**if(n %2==0) {**

**printf("%d \n ",n); for(rc=1;rc<=5-5;rc++)**

**n++; printf(“ ”);**

**} for(c=1;c<=r;c++)**

**while(n<=range); printf(“\*”);**

**return 0; printf(“\n”);**

**} return 0;**

**}**

**Program #10: Pattern program #11: Pattern**

**#include<stdio.h> \*\*\*\*\* #include<stdio.h> \*\*\*\*\***

**#include<conio.h> \*\*\*\* #include<conio.h> \*\*\*\*\***

**int I,j,k; \*\*\* main() \*\*\*\*\***

**char ch; \*\* { int r,c;**

**\* for(r=1;r<=5;r++)**

**printf("Enter Number for Rows:\n"); {**

**scanf("%d",&k); for(c=1;c<=5;c++)**

**printf("Choose Any Characters:\n"); printf(“\*”);**

**ch=getch(); printf(“\n”);**

**for(i=1;i<=k;i++) }**

**{ return 0;**

**for(j=1;j<=k-i;j++) }**

**{**

**printf("%c",ch);**

**}**

**printf("\n");**

**}**

**return 0;**

**}**

**Program #12: pattern \***

**\*\***

**\*\*\***

**\*\*\*\***

**\*\*\*\*\***

**#include<stdio.h>**

**#include<conio.h>**

**main()**

**{**

**int r,c;**

**for(r=1;r<=5;r++)**

**{**

**for(c=1;c<=r;c++)**

**printf("\*");**

**printf("\n");**

**}**

**return 0;**

**}**

**Program #13: pattern \***

**\*\***

**\*\*\***

**\*\*\*\***

**\*\*\*\*\***

**#include<stdio.h>**

**#include<conio.h>**

**main()**

**{**

**int z=1;**

**int n=5;**

**int i=1;**

**int j;**

**int k=1;**

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

**{**

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

**{**

**printf(" ");**

**}**

**for(k=1;k<=z;k++)**

**{**

**printf("\*");**

**}**

**z++;**

**printf("\n");**

**}**

**return 0;**

**}**

**Program #14: Pyramid \***

**\*\*\***

**\*\*\*\*\***

**\*\*\*\*\*\*\***

**#include<stdio.h>**

**#include<conio.h>**

**main()**

**{**

**int stars=1;**

**int height=5;**

**int space=height-1;**

**int i,j,k;**

**for(i=0;i<height;i++)**

**{**

**for(j=space;j>i;j--)**

**{**

**printf(" ");**

**}**

**for(k=0;k<stars;k++)**

**{**

**printf("\*");**

**}**

**stars+=2;**

**printf("\n");**

**}**

**return 0;**

**}**

**Program # 15: Diamond \***

**\*\*\***

**\*\*\*\*\***

**\*\*\***

**\*\***

**\***

**#include<stdio.h> for(r=1;r<=n;r++)**

**#include<conio.h> {**

**main() for(c=1-1;c<=r-1;c++)**

**{ {**

**int n,r,c,temp; printf(“ ”);**

**printf("Enter Numbers For Rows:\n"); }**

**scanf("%d",&n); for(c=n-1;c>=r;c--)**

**temp=n; {**

**for(r=1;r<=n;r++) printf(“\*”);**

**{ }**

**for(c=1;c<temp;c++) for(c=n-1;c-1>=r;c--)**

**{ {**

**printf(" "); printf(“\*”);**

**} }**

**temp--; printf(“\n”);**

**for(c=1;c<=2\*r-1;c++) }**

**{ return 0;**

**printf("\*"); }**

**}**

**printf("\n");**

**}**

**Program #16: Vowel Characters (using FUNCTION)**

**#include<stdio.h>**

**#include<conio.h>**

**void vowel(char ch);**

**main()**

**{**

**char n;**

**printf("Enter The Vowel Charcters :\n");**

**scanf("%c",&n);**

**vowel(n);**

**return 0;**

**}**

**void vowel(char ch)**

**{**

**char n;**

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

**printf("you Enter a Vowel Characters:\n");**

**else**

**printf("You Did Enter A vowel characters Try Other one:\n");**

**}**

**Program #17: Maximum Number (using FUNCTION)**

**#include<stdio.h>**

**#include<conio.h>**

**int max(int a,int b,int c);**

**main()**

**{**

**int n1,n2,n3,maximum;**

**printf("Enter The Three Numbers:\n");**

**scanf("%d%d%d",&n1,&n2,&n3);**

**maximum=max(n1,n2,n3);**

**return 0;**

**}**

**int max(int a,int b,int c)**

**{**

**int maximum;**

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

**printf("'A'is a Maximum Number:%d\n",a);**

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

**printf("'B'is a Maximum Number:%d\n",b);**

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

**printf("'C'is a Maximum Number:%d\n",c);**

**return maximum;**

**}**

**Program #18: Maximum Number (using CALL BY REFERENCE)**

**#include<stdio.h>**

**#include<conio.h>**

**int max(int &a,int &b,int &c);**

**main()**

**{**

**int n1,n2,n3,maximum;**

**printf("Enter The Three Numbers :\n");**

**scanf("%d%d%d",&n1,&n2,&n3);**

**maximum=max(n1,n2,n3);**

**return 0;**

**}**

**int max(int &a,int &b,int &c)**

**{**

**int maximum;**

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

**printf("'A'is a Maximum Number:%d\n",a);**

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

**printf("'B'is a MAximum Number:%d\n",b);**

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

**printf("'C'is a Maximum Number:%d\n",c);**

**return maximum;**

**}**

**Program #19: Factorial (Using RECURSIVE FUNCTION)**

**#include<stdio.h>**

**#include<conio.h>**

**int fact(int n);**

**main()**

**{**

**int a;**

**int res;**

**printf("Enter The Any Number:\n");**

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

**res=fact(a);**

**printf("Factorial is :%d\n",res);**

**return 0;**

**}**

**int fact(int n)**

**{**

**if(n==0)**

**return 1;**

**else**

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

**}**

**Program #20: Maximum Number (using ARRAY)**

**#include<stdio.h>**

**#include<conio.h>**

**main()**

**{**

**int n,c,max,array[100],loc=1;**

**printf("Enter The Number Of Array In Element :\n");**

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

**printf("Enter The %d Integer Numbers:\n",n);**

**for(c=0;c<n;c++)**

**scanf("%d",&array[0]);**

**max=array[0];**

**for(c=1;c<n;c++)**

**{**

**if(max>array[c])**

**{**

**max>array[c];**

**loc=c+1;**

**}**

**}**

**printf("Maximum Number present At Location %d And Its Value Is %d:\n",loc,max);**

**return 0;**

**}**

**Program #21: Minimum Number (Using ARRAY)**

**#include<stdio.h>**

**#include<conio.h>**

**main()**

**{**

**int n,c,max,array[100],loc=1;**

**printf("Enter The Number Of Array In Element :\n");**

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

**printf("Enter The %d Integer Numbers:\n",n);**

**for(c=0;c<n;c++)**

**scanf("%d",&array[0]);**

**max=array[0];**

**for(c=1;c<n;c++)**

**{**

**if(max>array[c])**

**{**

**max>array[c];**

**loc=c+1;**

**}**

**}**

**printf("Maximum Number present At Location %d And Its Value Is %d:\n",loc,max);**

**return 0;**

**}**

**Program #22: Square & Cube (using ARRAY)**

**#include<stdio.h>**

**#include<conio.h>**

**main()**

**{**

**int size,i=0;**

**printf("Enter The Number Of Element In Array For Square & cube:\n");**

**scanf("%d",&size);**

**int n[size];**

**printf("Now Enter %d Numbers :\n",size);**

**for(i=0;i<size;i++)**

**{**

**printf("Enter %d Number:\n",i+1);**

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

**}**

**printf("Square \t\tCube \n\n");**

**for(i=0;i<size;i++)**

**{**

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

**}**

**return 0;**

**}**

**Program #23: Student Data (using STURCTURE)**

**#include<stdio.h>**

**#include<conio.h>**

**struct student**

**{**

**char name[100];**

**int roll;**

**int marks;**

**};**

**main()**

**{**

**int n;**

**printf("Enter The Number Of Element In Array:\n");**

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

**printf("Enter %d Students Data:\n",n);**

**system("cls");**

**struct student s[n];**

**int i,c=1;**

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

**{**

**printf("Enter %d Student Name :\n",c);**

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

**system("cls");**

**printf("Enter %d Student Roll #:\n",c);**

**scanf("%d",&s[i].roll);**

**system("cls");**

**printf("Enter CALCULUS Marks:\n",c);**

**scanf("%d",&s[i].marks);**

**system("cls");**

**printf("Enter ICT Marks:\n",c);**

**scanf("%d",&s[i].marks);**

**system("cls");**

**printf("Enter ENGLISH Marks:\n",c);**

**scanf("%d",&s[i].marks);**

**system("cls");**

**printf("Enter PROGRAMMING FUNDAMENTAL Marks:\n",c);**

**scanf("%d",&s[i].marks);**

**system("cls");**

**printf("Enter BASIC ELECTRONICS Marks:\n",c);**

**scanf("%d",&s[i].marks);**

**c++;**

**}**

**return 0;**

**}**