PROGRAM 1

#include <stdio.h>

int main() {

int num;

printf("Enter a Number: ");

scanf("%d",&num);

if(num>0){

printf("%d is a positive number",num);

}

else if(num<0){

printf("%d is a negative number",num);

}

else{

printf("%d is zero",num);

}

return 0;

}

PROGRAM 2

#include <stdio.h>

int main() {

char day;

printf("Enter a day name(Mon/Tue/Wed/Thur/Fri/Sat/Sun): ");

scanf("%c",&day);

if(day == 'M') {

printf("Monday is a Weekday\n");

}

else if(day == 'T') {

printf("Tuesday is a Weekday\n");

}

else if(day == 'W') {

printf("Wednesday is a Weekday\n");

}

else if(day == 't') {

printf("Thursday is a Weekday\n");

}

else if(day == 'F') {

printf("Friday is a Weekday\n");

}

else if(day == 'S') {

printf("Saturday is a Weekend\n");

}

else if(day == 's') {

printf("Sunday is a Weekend\n");

}

else{

printf("Invalid input");

}

return 0;

}

PROGRAM 3

#include <stdio.h>

int main() {

int a,b,c;

printf("Enter the lengths of the three sides of the triangle: ");

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

if(a<=0||b<=0||c<=0)

{

printf("Invalid side lengths. All sides must be positive.\n");

}

else if (a+b<=c||a+c<=b ||b+c<=a)

{

printf("Triangle with sides %d, %d, %d is Invalid Triangle\n",a,b,c);

}

else

{

printf("Triangle with sides %d, %d, %d is Valid Triangle\n",a,b,c);

}

return 0;

}

PROGRAM 4

#include<stdio.h>

int main()

{

int age;

printf("Enter your Age: ");

scanf("%d",&age);

if(age<=12 && age>0)

{

printf("Based on your age of %d years,You belongs to the Child Category.",age);

}

else if(age<=19 && age>0)

{

printf("Based on your age of %d years,You belongs to the Teenager Category.",age);

}

else if(age<=59 && age>0)

{

printf("Based on your age of %d years,You belongs to the Adult Category.",age);

}

else if(age>=60 && age>0)

{

printf("Based on your age of %d years,You belongs to the Senior Category.",age);

}

else{

printf("Invalid input.Please enter a valid age.");

}

return 0;

}

PROGRAM 5

#include<stdio.h>

int main(){

char light;

printf("Enter the light(Red/Light/Green)\n");

scanf("%c",&light);

if(light == 'R'){

printf("Stop");

}

else if(light=='G'){

printf("Go");

}

else if (light=='Y'){

printf("Procced with Caution");

}

else{

printf("Invalid input");

}

return 0;

}

PROGRAM 6

#include<stdio.h>

int main()

{

float a,b,;

char num='%';

printf("Original price = $");

scanf("%f",&a);

printf("Discount percentage = ");

scanf("%f",&b);

printf("\n\nOriginal price: $%.2f\n",a);

printf("Discount percentage: %.2f%c\n",b,num);

printf("Discounted price = $%.2f\n",a-(a\*b/100) );

if(a<0){

printf("Please enter a valid non negative price");

}

else if (a==0){

printf("No discount applied");

}

return 0;

}

PROGRAM 7

#include<stdio.h>

int main()

{

int a;

printf("Enter the month: ");

scanf("%d",&a);

if(a<=5 && a>=3)

{

printf("You are travelling in Spring\n");

printf("Activities:Enjoy Blooming Flowers, Hiking\n");

printf("Clothing:Light Jackets,Layers\n");

printf("Places to visit:Nationl parks, Gardens");

}

else if (a>=6 && a<=8)

{

printf("You are travelling in Summer\n");

printf("Activities:Beach Activities,Water Sports\n");

printf("Clothing:Swimsuits,Light Clothing\n");

printf("Places to visit:Beach Resorts,Lakeside Destinations");

}

else if(a>=9 && a<=11)

{

printf("You are travelling in Fall\n");

printf("Activities:Apple picking,Leaf peeping\n");

printf("Clothing:Sweaters,Jeans\n");

printf("Places to visit:Orchards,Countryside");

}

else if(a==12 || a==1 || a==2){

printf("You are travelling in Winter\n");

printf("Activities:Skiing,Snowboarding\n");

printf("Clothing:Wintercoats,Gloves,Hats\n");

printf("Places to visit:Skii resorts,Winter wonderlands");

}

else

{

printf("Please enter the valid month ");}

return 0;

}

PROGRAM 8

#include <stdio.h>

int main() {

float a;

printf("Input : ");

scanf("%f",&a);

printf("Transaction Amount : $%.2f\n",a);

if(a<=50 && a>0)

{

printf("Category : Low Expense Category");

}

else if(a<=100 && a>0){

printf("Category : Medium Expense Category");

}

else if(a>100 && a>0){

printf("Category : High Expense Category");

}

else{

printf("Invalid Input");

}

return 0;

}

PROGRAM 9

#include<stdio.h>

int main(){

int a;

printf("Enter the temperature in celsius:");

scanf("%d",&a);

if(a<0){

printf("Water is in solid state");}

else if(a<=100 && a>=0){

printf("Water is in liquid state");

}

else if (a>100){

printf("Water is in gas state");

}

else{

printf("Please enter a valid input numeric temperture");}

}

PROGRAM 10

include<stdio.h>

int main()

{

int x,y;

char a;

printf("Enter the coordinates (x,y):");

scanf("%d",&x);

scanf("%d",&y);

printf("Enter the coordinate y:");

scanf("%d",&y);

if(x='a'||y='a')

{

printf("Please enter the valid numeric coordinates");

}

else if (x>0&&y>0)

{

printf("The point %d,%d is lies on the first quadrant",x,y);

}

else if (x<0&&y>0)

{

printf("The point %d,%d is lies on the second quadrant",x,y);

}

else if(x<0&&y<0)

{

printf("The point %d,%d lies on the third quadrant",x,y);

}

else if (x>0&&y<0)

{

printf("The point %d,%d lies on the fourth quadrant",x,y);

}

else if (x==0&&y>0)

{

printf("The point %d,%d lies on y axis",x,y);

}

else if(y==0&&x>0)

{

printf("The point %d,%d lies on the x axis",x,y);

}

else if (x==0&&y==0)

{

printf("the point %d,%d lies at the origin",x,y);

}

return 0;

}