Assignment 8 C Language Live Community Classes

1. //Write a program to check whether a given number is divisible by 3 and divisible by 2.

#include <stdio.h>

int main(){

int number;

printf("Enter a number : ");

scanf("%d", &number);

if (number %2 == 0 && number %3 == 0){

printf("%d is divisible by 2 as well as 3.", number);

}

else if (number % 2 == 0){

printf("%d is divisible by 2.", number);

}

else if (number % 3 == 0){

printf("%d is divisible by 3.", number);

}

else{

printf("%d is neither divided by 2 nor 3.", number);

}

return 0;

}

1. //Write a program to check whether a given number is divisible by 7 or divisible by 3.

#include <stdio.h>

int main(){

int number;

printf("Enter a number : ");

scanf("%d", &number);

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

printf("%d is divisible by 2 as well as 3.", number);

}

else if (number % 7 == 0){

printf("%d is divisible by 7.", number);

}

else if (number % 3 == 0){

printf("%d is divisible by 3.", number);

}

else{

printf("%d is neither divided by 7 nor 3.", number);

}

return 0;

}

1. //Write a program to check whether a given number is positive, negative or zero.

#include <stdio.h>

int main(){

int number;

printf("Enter a number : ");

scanf("%d", &number);

if (number < 0){

printf("%d is negative.", number);

}

else if (number > 0){

printf("%d is positive.", number);

}

else{

printf("%d is zero.", number);

}

return 0;

}

1. //Write a program to check whether a given year is a leap year or not.

#include <stdio.h>

int main()

{

int year;

printf("Enter a year : ");

scanf("%d", &year);

if (year % 4 == 0 && year % 100 != 0){

printf("%d is a leap year.", year);

}

else if (year % 100 == 0 && year % 400 == 0)

{

printf("%d is leap year.", year);

}

else{

printf("%d is not a leap year.", year);

}

return 0;

}

1. //Write a program to find greater among three numbers. If two or three numbers are identical and greatest among all then print it only once.

#include <stdio.h>

int main(){

int n1, n2, n3;

printf("Enter three numbers : ");

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

if (n1 > n2 && n1 >n3){

printf("%d is greater.", n1);

}

else if (n2 > n1 && n2 > n3){

printf("%d is greater.", n2);

}

else if (n3 > n1 && n3 > n2){

printf("%d is greater.", n3);

}

else if(n1 == n2 && n2 ==n3){

printf("They are all equal.");

}

else if (n1 == n2 && n1 > n3){

printf("%d is greater.", n1);

}

else if (n1 == n2 && n1 < n3){

printf("%d is greater.", n3);

}

else if (n1 == n3 && n2 > n3){

printf("%d is greater.", n2);

}

else if (n1 == n2 && n2 < n3){

printf("%d is greater.", n3);

}

return 0;

}

1. //Write a program to check whether a given character is an alphabet (uppercase), an alphabet (lower case), a digit or a special character.

#include <stdio.h>

int main(){

char Character;

printf("Enter a character : ");

scanf("%c", &Character);

if (Character >= 65 && Character <= 90){

printf("%c is an uppercase character.", Character);

}

else if (Character >= 97 && Character <= 122){

printf("%c is a lowercase character.", Character);

}

else if(Character >= 48 && Character <= 57){

printf("%c is a digit.", Character);

}

else if (Character >= 33 && Character <=47){

printf("%c is a special character.", Character);

}

return 0;

}

1. //Write a program which takes the length of the sides of a triangle as an input. Display whether the triangle is valid or not.

#include <stdio.h>

int main(){

int side1, side2, side3, triangleSum;

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

scanf("%d %d %d", &side1, &side2, &side3);

triangleSum = side1 + side2 + side3;

if (triangleSum < 0 && triangleSum > 180){

printf("Not a valid triangle.");

}

else{

printf("It is a valid triangle.");

}

return 0;

}

1. //Write a program which takes the month number as an input and display number of days in that month.

#include <stdio.h>

int main(){

int month;

printf("Enter a month(in numbers) : ");

scanf("%d", &month);

if (month == 1 || month == 3 || month == 5 || month == 7 || month == 8 || month == 10 || month == 12){

printf("Month %d has 31 days.", month);

}

else if (month == 4 || month == 6 || month == 9 || month == 11){

printf("Month %d has 30 days.", month);

}

else if(month == 2){

printf("Month %d has 28/29 days.", month);

}

return 0;

}

1. NA
2. /\*Write a C program to input marks of five subjects Physics, Chemistry, Biology,

Mathematics and Computer. Calculate percentage and grade according to following:

Percentage >= 90% : Grade A

Percentage >= 80% : Grade B

Percentage >= 70% : Grade C

Percentage >= 60% : Grade D

Percentage >= 40% : Grade E

Percentage < 40% : Grade F\*/

#include <stdio.h>

int main()

{

int Physics, Chemistry, Biology, Mathematics, Computer

float percentage;

printf("Enter the marks obtained in Physics : ");

scanf("%d", &Physics);

printf("Enter the marks obtained in Chemistry : ");

scanf("%d", &Chemistry);

printf("Enter the marks obtained in Mathematics : ");

scanf("%d", &Mathematics);

printf("Enter the marks obtained in Biology : ");

scanf("%d", &Biology);

printf("Enter the marks obtained in Computer : ");

scanf("%d", &Computer);

percentage = (Physics + Chemistry + Mathematics + Biology + Computer)/5;

if (percentage >=90){

printf("Grade A");

}

else if (percentage >=80 && percentage <90){

printf("Grade B");

}

else if (percentage >=70 && percentage <80){

printf("Grade C");

}

else if (percentage >=60 && percentage <70){

printf("Grade D");

}

else if (percentage >=50 && percentage <60){

printf("Grade E");

}

else if (percentage < 40){

printf("Grade F");

}

return 0;

}