Assignment -3

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1.Write a program to check whether a given number is positive or non-positive.

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#include <stdio.h>

int main()

{

int number;

printf("Enter any number: ");

scanf("%d",&number);

if (number > 0)

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

else if (number < 0)

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

else

printf(" You entered value zero.");

return 0;

}

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2. Write a program to check whether a given number is divisible by 5 or not

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#include<stdio.h>

int main()

{

int a,b;

printf("Enter the Number");

scanf("%d",&a);

if(a%5==0)

printf("Number %d is divisible by 5");

else

printf("Number %d is not Divisible by 5");

getch();

return 0;

}

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3. Write a program to check whether a given number is an even number or an odd

number.

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#include<stdio.h>

int main()

{

int a,b;

printf("Enter the Number");

scanf("%d",&a);

if(a%2==0)

printf("Number is Even");

else

printf("Number is odd");

getch();

return 0;

}

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4. Write a program to check whether a given number is an even number or an odd

number without using % operator.

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#include<stdio.h>

int main()

{

int x;

printf("Enter a number");

scanf("%d",&x);

if(x &=1)

printf("Numner is odd");

else

printf(".............Number is even.........");

}

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5. Write a program to check whether a given number is a three-digit number or not.

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#include<stdio.h>

int main()

{

int num;

printf("Enter Number :");

scanf("%d",&num);

if(num<99)

printf("......Two\_Digit Number......");

else if(num>100)

printf(".......Three\_Digit Number.......");

else

printf(".......four Digit Number.......");

getch();

return 0;

}

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6. Write a program to print greater between two numbers. Print one number of both are

the same.

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#include <stdio.h>

int main()

{

int num1, num2;

printf("Please Enter Two different values\n");

scanf("%d %d", &num1, &num2);

if(num1 > num2)

{

printf("%d is Largest\n", num1);

}

else if (num2 > num1)

{

printf("%d is Largest\n", num2);

}

else

{

printf("Both are Equal\n");

}

return 0;

}

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7. Write a program to check whether roots of a given quadratic equation are real &

distinct, real & equal or imaginary roots.

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#include<stdio.h>

int main()

{

int a=2,b=9,c=3;

int disc=b\*b-4\*a\*c;

if(disc>0)

printf("Real & Distinct");

else if(disc<0)

printf("Imaginary");

else

printf("Real and equal");

getch();

return 0;

}

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

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#include<stdio.h>

int main()

{

int year;

printf("Enter Year :");

scanf("%d",&year);

if(year%2==0&& year%4==0)

printf(".......Leap Year......");

else if(year%400==0)

printf(".......Century Year.......");

else

printf(".......Not\_Century Year.......");

getch();

return 0;

}

9. Write a program to find the greatest among three given numbers. Print number once

if the greatest number appears two or three times.

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#include<stdio.h>

int main()

{

int a,b,c;

printf("Enter A ,B and C Values :\n");

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

if(a>b&&a>c)

printf("A = %d is Greater among B and C",a);

else if(b>c)

printf("B = %d is Greater among A and C ",b);

else

printf("C = %d is Greater among A and B",c);

getch();

return 0;

}

10. Write a program which takes the cost price and selling price of a product from the

user. Now calculate and print profit or loss percentage.

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#include<stdio.h>

int main()

{

float Sellv,Purchasev,Profit,Loss;

printf("Enter the Purchase Price Value\n");

scanf("%f",&Purchasev);

printf("Enter the Selling Price Value\n");

scanf("%f",&Sellv);

if(Sellv>Purchasev)

{

Profit =(Sellv-Purchasev)/Purchasev\*100;

printf("The Profit is %f",Profit);

}

else if(Purchasev>Sellv)

{

Loss=(Sellv-Purchasev)/Purchasev\*100;

printf("The Loss is %f",Loss);

} else

{ printf("No Profit and Loss");

return 0;

}

11. Write a program to take marks of 5 subjects from the user. Assume marks are given

out of 100 and passing marks is 33. Now display whether the candidate passed the

examination or failed.

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#include<stdio.h>

int main()

{

int a,b,c,d,e;

printf("\n Enter Five Subject Marks :");

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

if(a>=33 &&b>=33 &&c>=33 && d>=33 && e>=33)

printf(".......Pass.......");

else

printf(".......Fail.......");

getch();

return 0;

}

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12. Write a program to check whether a given alphabet is in uppercase or lowercase.

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#include<stdio.h>

int main()

{

int ch;

printf("Enter caharacter :");

scanf("%d",&ch);

if(ch>=97&&ch<=122)

printf(".......Lowercase.......");

else if(ch>=65&&ch<=90)

printf(".......Uppercase.......");

else

printf(".......Special Character.......");

getch();

return 0;

}

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

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#include<stdio.h>

int main()

{

int Num;

printf("Enter Number :");

scanf("%d",&Num);

if(Num%2==0)

printf("\n Number is Divided by 2");

else if(Num%3==0)

printf("\n Number is Divided by 3");

else

printf(".Number is Niether Divided by 2 nor by 3");

getch();

return 0;

}

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

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#include<stdio.h>

int main()

{

int Num;

printf("Enter Number :");

scanf("%d",&Num);

if(Num%7==0)

printf("\n Number is Divided by 7");

else if(Num%3==0)

printf("\n Number is Divided by 3");

else

printf(".Number is Niether Divided by 2 nor by 3");

getch();

return 0;

}

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

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int main()

{

int x;

printf("Enter Number :");

scanf("%d",&x);

if(x>0)

printf(".......Positive.......");

else if(x<0)

printf(".......Negetive.......");

else

printf(".......You have Entered 0.......");

getch();

return 0;

}

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16. Write a program to check whether a given character is an alphabet (uppercase), an

alphabet (lower case), a digit or a special character.

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#include<stdio.h>

int main()

{

char ch;

printf("Enter caharacter :");

scanf("%c",&ch);

if(ch>='a'&&ch<='z')

printf(".......Lowercase.......");

else if(ch>='A'&&ch<='Z')

printf(".......Uppercase.......");

else if(ch>='0'&&ch<='9')

printf(".......You have Entered Digit.......");

else

printf(".......Special Character.......");

getch();

return 0;

}

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17. Write a program which takes the length of the sides of a triangle as an input. Display

whether the triangle is valid or not.

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#include <stdio.h>

int main()

{

int side1, side2, side3;

printf("Enter Length of Three Sides of a Triangle\n");

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

if((side1 + side2 > side3)&&(side2 + side3 > side1)

&&(side3 + side1 > side2)) {

printf("It is a Valid Triangle\n");

} else {

printf("It is an invalid Triangle");

}

return 0;

}

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18. Write a program which takes the month number as an input and display number of

days in that month.

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#include <stdio.h>

int main()

{

int month;

printf("Enter month number (1-12): ");

scanf("%d", &month);

if(month == 1)

{

printf("January is = 31 days January");

}

else if(month == 2)

{

printf(" February is = 28 or 29 days");

}

else if(month == 3)

{

printf(" March 31 days");

}

else if(month == 4)

{

printf(" April = 30 days");

}

else if(month == 5)

{

printf(" May = 31 days");

}

else if(month == 6)

{

printf(" June 30 days");

}

else if(month == 7)

{

printf(" July = 31 days");

}

else if(month == 8)

{

printf(" August = 31 days");

}

else if(month == 9)

{

printf(" September = 30 days");

}

else if(month == 10)

{

printf(" October is = 31 days");

}

else if(month == 11)

{

printf(" November = 30 days");

}

else if(month == 12)

{

printf(" December is = 31 days");

}

else

{

printf("Invalid input! Please enter month number between (1-12).");

}

return 0;

}

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