| **Practical Number** | 03 |
| --- | --- |
| **Areas covered** | Operators , if conditions |

1. Write a program to input two numbers and display the highest number.

#include<stdio.h>

int main()

{

int num1,num2;

printf("Enter The 2 Numbers - ");

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

if(num1>num2)

printf("\nThe Highest Number Is - %d\n",num1);

else

printf("\nThe Highest Number Is - %d\n",num2);

}

1. Write a complete program to ask user enter three integer numbers, and then tell the user the largest value and smallest value among the three numbers.

#include<stdio.h>

int main()

{

int inum1,inum2,inum3,hinum,sinum;

printf("Enter The First Integer - ");

scanf("%d",&inum1);

printf("\nEnter The Second Integer - ");

scanf("%d",&inum2);

printf("\nEnter The Third Integer - ");

scanf("%d",&inum3);

if(inum1>inum2&&inum1>inum3)

{hinum=inum1;

if(inum2>inum3)

sinum=inum3;

else

sinum=inum2;}

else if (inum2>inum1&&inum2>inum3)

{hinum=inum2;

if(inum1>inum3)

sinum=inum3;

else

sinum=inum1;}

else

{hinum=inum3;

if(inum1>inum2)

sinum=inum2;

else

sinum=inum1;}

printf("\nThe Highest Integer Is - %d\n",hinum);

printf("\nThe Smallest Integer Is - %d\n",sinum);

}

1. Display employee name, new salary, when the user inputs employee name, and basic salary. You can refer following formula and the table to calculate new salary:

New Salary = Basic Salary + Increment

Basic Salary Increment

Less than 5000 5% of Basic Salary

More than or equal 5000

and less than 10000 10% of Basic Salary

More than or equal 10,000 15% of Basic Salary

#include<stdio.h>

int main()

{

char ename[30];

int bsalary,nsalary,incr;

printf("Enter The Name Of The Employee - ");

scanf("%s",&ename);

printf("\nEnter The Basic Salary Of The Employee - ");

scanf("%d",&bsalary);

if(bsalary<5000)

incr=bsalary/20;

else if(bsalary<10000)

incr=bsalary/10;

else

incr=(bsalary\*3)/20;

nsalary=bsalary+incr;

printf("\n%s Your New Salary Is %d\n",ename,nsalary);

}

1. Diameter, Circumference and Area of a Circle) Write a program that reads in the radius

of a circle and prints the circle’s diameter, circumference, and area. Use the constant value 3.14159 for π. Perform each of these calculations inside the printf statement(s) and use the conversion specifier %f.

#include<stdio.h>

int main()

{

const float r,d,c, a, p = 3.14159;

printf("Enter The Radius Of The Circle - ");

scanf("%f", &r);

printf("The Diameter Of The Circle Is %f\n", 2.0 \* r);

printf("The Circumference Of The Circle Is %f\n", 2.0 \* p \* r);

printf("The Area Of The Circle Is %f\n", p \* r \* r);

}

1. Write a program that reads in two integers and determines and prints if the first

is a multiple of the second.

#include<stdio.h>

int main()

{

int m,n;

printf("Enter The First Integer - ");

scanf("%d",&m);

printf("\nEnter The Second Integer - ");

scanf("%d",&n);

if(m%n==0)

printf("\nThe First Integer Is A Multiple Of The Second Integer\n");

else

printf("\nThe First Integer Is Not A Multiple Of The Second Integer\n");

}

1. Write a C program that prints the integer equivalents of some uppercase letters, lowercase letters, digits, and special symbols. As a minimum, determine the integer equivalents of the following: A B C a b c 0 1 2 $ \* + / and the blank character.

#include <stdio.h>

int main() {

printf("\n");

printf(" = %d\n", ' ');

printf("! = %d\n", '!');

printf("\""" = %d\n",'"');

printf("# = %d\n", '#');

printf("$ = %d\n", '$');

printf("%% = %d\n", '%');

printf("& = %d\n", '&');

printf("' = %d\n", '\'');

printf("( = %d\n", '(');

printf(") = %d\n", ')');

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

printf(", = %d\n", ',');

printf("- = %d\n", '-');

printf(". = %d\n", '.');

printf("/ = %d\n", '/');

printf("0 = %d\n", '0');

printf("1 = %d\n", '1');

printf("2 = %d\n", '2');

printf("3 = %d\n", '3');

printf("4 = %d\n", '4');

printf("5 = %d\n", '5');

printf("6 = %d\n", '6');

printf("7 = %d\n", '7');

printf("8 = %d\n", '8');

printf("9 = %d\n", '9');

printf(": = %d\n", ':');

printf("; = %d\n", ';');

printf("< = %d\n", '<');

printf("= = %d\n", '=');

printf("> = %d\n", '>');

printf("? = %d\n", '?');

printf("@ = %d\n", '@');

printf("A = %d\n", 'A');

printf("B = %d\n", 'B');

printf("C = %d\n", 'C');

printf("D = %d\n", 'D');

printf("E = %d\n", 'E');

printf("F = %d\n", 'F');

printf("G = %d\n", 'G');

printf("H = %d\n", 'H');

printf("I = %d\n", 'I');

printf("J = %d\n", 'J');

printf("K = %d\n", 'K');

printf("L = %d\n", 'L');

printf("M = %d\n", 'M');

printf("N = %d\n", 'N');

printf("O = %d\n", 'O');

printf("P = %d\n", 'P');

printf("Q = %d\n", 'Q');

printf("R = %d\n", 'R');

printf("S = %d\n", 'S');

printf("T = %d\n", 'T');

printf("U = %d\n", 'U');

printf("V = %d\n", 'V');

printf("W = %d\n", 'W');

printf("X = %d\n", 'X');

printf("Y = %d\n", 'Y');

printf("Z = %d\n", 'Z');

printf("[ = %d\n", '[');

printf("\\ = %d\n", '\\');

printf("] = %d\n", ']');

printf("^ = %d\n", '^');

printf("\_ = %d\n", '\_');

printf("` = %d\n", '`');

printf("a = %d\n", 'a');

printf("b = %d\n", 'b');

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

printf("d = %d\n", 'd');

printf("e = %d\n", 'e');

printf("f = %d\n", 'f');

printf("g = %d\n", 'g');

printf("h = %d\n", 'h');

printf("i = %d\n", 'i');

printf("j = %d\n", 'j');

printf("k = %d\n", 'k');

printf("l = %d\n", 'l');

printf("m = %d\n", 'm');

printf("n = %d\n", 'n');

printf("o = %d\n", 'o');

printf("p = %d\n", 'p');

printf("q = %d\n", 'q');

printf("r = %d\n", 'r');

printf("s = %d\n", 's');

printf("t = %d\n", 't');

printf("u = %d\n", 'u');

printf("v = %d\n", 'v');

printf("w = %d\n", 'w');

printf("x = %d\n", 'x');

printf("y = %d\n", 'y');

printf("z = %d\n", 'z');

printf("{ = %d\n", '{');

printf("| = %d\n", '|');

printf("} = %d\n", '}');

printf("~ = %d\n", '~');

return 0;

}

1. The gross remuneration of a company salesman comprises the Basic Salary and certain additional allowances and bonuses as given below:

Salesmen with over 5 years’ service receive a 10% additional allowance of Basic Salary each month.

Salesmen working in Colombo (Input character ‘C’ if the city is Colombo) receive an additional allowance of Rs. 2,500/- per month.

The monthly bonus payment is computed as given below:

| **Monthly Sales(Rs)** | **Bonus as a percentage**  **of monthly sales** |
| --- | --- |
| 0-25000  25000-50000  >=50000 | 10  12  15 |

Write a program to output the gross monthly remuneration of a salesman.

#include<stdio.h>

int main()

{

int bsalary,syears,sallow,gsalary,msales,sbonus,aallow;

char city[20];

printf("Enter Your Basic Salary - ");

scanf("%d",&bsalary);

printf("\nEnter The Number Of Your Service Years - ");

scanf("%d",&syears);

printf("\nEnter The Monthly Sales Amount In Rupees - ");

scanf("%d",&msales);

printf("\nEnter The City You Are Working - ");

scanf("%s",city);

if (city[0]=='C')

aallow=2500;

else

aallow=0;

if(syears>5)

sallow=bsalary/10;

else

sallow=0;

if(msales>=50000)

sbonus=(msales\*3)/20;

else if(msales>=25000)

sbonus=(msales\*3)/25;

else

sbonus=msales/10;

gsalary=bsalary+sallow+sbonus+aallow;

printf("\nThe Gross Salary Of A Employee Is - %d\n",gsalary);

}