# PRACTICAL 3

1. int main() { int num1, num2;

printf("Enter the first number: "); scanf("%d", &num1);

printf("Enter the second number: "); scanf("%d", &num2);

if (num1 > num2) { printf("The highest number is: %d\n", num1);

} else {

printf("The highest number is: %d\n", num2);

}

1. int main() { int num1, num2, num3; int largest, smallest;

printf("Enter the first number: "); scanf("%d", &num1); printf("Enter the second number: "); scanf("%d", &num2);

printf("Enter the third number: "); scanf("%d", &num3);

// Assume the first number is the largest and smallest initially largest = num1; smallest = num1;

// Compare the second number with current largest and smallest

if (num2 > largest) { largest = num2;

}

if (num2 < smallest) { smallest = num2;

}

// Compare the third number with current largest and smallest

if (num3 > largest) { largest = num3;

}

if (num3 < smallest) { smallest = num3;

}

printf("The largest number is: %d\n", largest); printf("The smallest number is: %d\n", smallest); 3) int main() { char name[100]; float basicSalary, newSalary, increment;

printf("Enter employee name: "); fgets(name, sizeof(name), stdin);

printf("Enter basic salary: "); scanf("%f", &basicSalary);

if (basicSalary < 5000) { increment = basicSalary \* 0.05;

} else if (basicSalary >= 5000 && basicSalary < 10000) { increment = basicSalary \* 0.10;

} else {

increment = basicSalary \* 0.15;

}

newSalary = basicSalary + increment;

printf("\nEmployee Name: %s", name); printf("New Salary: %.2f\n", newSalary);

4)

#define PI 3.14159

int main() {

float radius;

float diameter, circumference, area;

printf("Enter the radius of the circle: "); scanf("%f", &radius);

diameter = 2 \* radius; circumference = 2 \* PI \* radius; area = PI \* radius \* radius;

printf("Diameter: %f\n", diameter); printf("Circumference: %f\n", circumference); printf("Area: %f\n", area);

1. int main() { int num1, num2;

printf("Enter the first integer: ");

scanf("%d", &num1);

printf("Enter the second integer: "); scanf("%d", &num2);

if (num1 % num2 == 0) { printf("%d is a multiple of %d\n", num1, num2);

} else {

printf("%d is not a multiple of %d\n", num1, num2);

}

1. int main() { printf("Integer equivalents:\n"); printf("Uppercase letters: A=%d, B=%d, C=%d\n", 'A', 'B', 'C'); printf("Lowercase letters: a=%d, b=%d, c=%d\n", 'a', 'b', 'c'); printf("Digits: 0=%d, 1=%d, 2=%d\n", '0', '1', '2'); printf("Special symbols: $=%d, \*=%d, +=%d, /=%d, Blank character=%d\n", '$', '\*', '+', '/', ' '); 7)

#define BONUS\_THRESHOLD\_1 25000

#define BONUS\_THRESHOLD\_2 50000

#define BONUS\_PERCENTAGE\_1 10

#define BONUS\_PERCENTAGE\_2 12

#define BONUS\_PERCENTAGE\_3 15

#define ADDITIONAL\_ALLOWANCE\_PERCENTAGE 10

#define COLOMBO\_ALLOWANCE 2500

int main() { float basicSalary, monthlySales; int yearsOfService;

char city;

float additionalAllowance = 0, bonus = 0; float grossRemuneration;

printf("Enter the basic salary: "); scanf("%f", &basicSalary);

printf("Enter the number of years of service: "); scanf("%d", &yearsOfService);

printf("Enter the monthly sales: "); scanf("%f", &monthlySales);

printf("Enter the city (C for Colombo, any other character for other cities): "); scanf(" %c", &city);

if (yearsOfService > 5) {

additionalAllowance = (ADDITIONAL\_ALLOWANCE\_PERCENTAGE / 100.0) \* basicSalary;

}

if (city == 'C') {

additionalAllowance += COLOMBO\_ALLOWANCE;

}

if (monthlySales >= 0 && monthlySales < BONUS\_THRESHOLD\_1) { bonus = (BONUS\_PERCENTAGE\_1 / 100.0) \* monthlySales;

} else if (monthlySales >= BONUS\_THRESHOLD\_1 && monthlySales < BONUS\_THRESHOLD\_2) { bonus = (BONUS\_PERCENTAGE\_2 / 100.0) \* monthlySales; } else if (monthlySales >= BONUS\_THRESHOLD\_2) { bonus = (BONUS\_PERCENTAGE\_3 / 100.0) \* monthlySales;

}

grossRemuneration = basicSalary + additionalAllowance + bonus;

printf("Gross monthly remuneration: %.2f\n", grossRemuneration);