Practical 03

1)

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
   float n1,n2,highest_number;

   printf("Enter the first number: ");
   scanf("%f",&n1);

   printf("Enter the second number: ");
   scanf("%f",&n2);

   if (n1 > n2)
   highest_number = n1;
   else
   highest_number = n2;
   printf("The Highsest number is: %.1f\n",highest_number);
    return 0;
}
```

2)

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
   int nu1,nu2,nu3;
   int max, min;

   printf("Enter the first number: ");
   scanf("%d",&nu1);

   printf("Enter the second number: ");
   scanf("%d",&nu2);

   printf("Enter thre third number: ");
   scanf("%d",&nu3);

   printf ("\n");

   max = nu1;

   if (nu2 > max)
```

```
        max = nu2;

    if (nu3 > max)
        max = nu3;

    min = nu1;

    if (nu2 < min)
         min = nu2;
    if (nu3 < min)
        min = nu3;
    printf("The largest number is %d\n", max);
    printf("The smallest number is %d\n", min);
    return 0;
}
```

3)

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
    char name[20];
```

```
float basic_salary, new_salary;

printf("Enter employee name: ");
scanf("%s", &name);

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

printf("\n");

if (basic_salary >= 10000)

{
 new_salary = basic_salary + (basic_salary * 15 / 100);
}
else if (basic_salary < 10000 && basic_salary >= 5000)

{
  new_salary = basic_salary + (basic_salary * 10 / 100);
}
else if (basic_salary < 5000)
{
  new_salary = basic_salary + (basic_salary * 5 / 100);
}
```

```
    printf("%s new salary is %.2f\n", name, new_salary);
    return 0;
}
```

4)

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
    float radius,pie = 3.14159; // Declare the variables

    printf("Enter circle radius: "); // User output and get user input
    scanf("%f",&radius);

    printf("\n"); // Skip a line for cleanliness

    printf("Circle diameter: %.2f units\n",radius*2); // Process in printf statement

    printf("Circumference of circle: %.2f units\n",2*pie*radius);  // Process in printf
statement
```

```
   printf("Area of circle: %.2f square units\n",pie*radius,radius);  // Process in
printf statement
   return 0;
}
```

5)

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
   int nu1, nu2;

   printf("Enter first number: ");
   scanf("%d", &nu1);

   printf("Enter second number: ");
   scanf("%d", &nu2);

   printf("\n");

   if (nu1 % nu2 == 0)
   {
      printf("%d is a multiple of %d\n.",nu1,nu2);
```

```
    }
    else
    {
        printf("%d is not a multiple of %d\n.",nu1,nu2);
    }
     return 0;
}
```

6)

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
    char upperCaseLetter;
    char lowerCaseLetter;
    char digit;
    char specialCharacter;
    char newline; // To consume the newline character

    // Find Uppercase ASCII value
    printf("Enter an uppercase letter: ");
    scanf(" %c",&upperCaseLetter);
```

```
int asciiValue1 = (int) upperCaseLetter;

printf("The ASCII value of %c is %d\n",upperCaseLetter,asciiValue1);

// Find Lowercase ASCII value
printf("Enter a lowercase letter: ");
scanf(" %c",&lowerCaseLetter);

int asciiValue2 = (int) lowerCaseLetter;

printf("The ASCII value of %c is %d\n",lowerCaseLetter,asciiValue2);

// Find Digits ASCII value
printf("Enter a digit: ");
scanf(" %c",&digit);

int asciiValue3 = (int) digit;

printf("The ASCII value of %c is %d\n",digit,asciiValue3);

// Find Special character ASCII value
printf("Enter a special character: ");
scanf(" %c",&specialCharacter);
```

```
    int asciiValue4 = (int) specialCharacter;

    printf("The ASCII value of %c is %d\n",specialCharacter,asciiValue4);
    return 0;
}
```

7)

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
    float basic_salary,allowance,bonus;
    float monthly_sales,gross_salary;
    int years_of_service;
    char city;

    // Get input values from the user
    printf("Enter the basic salary: ");
    scanf("%f",&basic_salary);

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

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

printf("Enter the city (C for Colombo):  \n");
scanf("%c",&city);

// Calculate additional allowance based on years of service
if (years_of_service >= 5)
{
   allowance = 0.1*basic_salary;
}
else
{
   allowance = 0;
}

// Calculate additional allowance based on city
if (city == 'C')
{
   allowance += 2500;
}

// Get monthly sales and calculate bonus
printf("Enter the monthly sales: ");
```

```
    scanf("%f",&monthly_sales);

    if (monthly_sales < 25000) {
        bonus = 0.1*monthly_sales;
    }
    else if (monthly_sales >= 25000 && monthly_sales < 50000)
    {
        bonus = 0.12*monthly_sales;
    }
    else if (monthly_sales >= 50000)
    {
        bonus = 0.15*monthly_sales;
    }

    // Calculate gross salary
    gross_salary = basic_salary + allowance + bonus;

    // Output the gross salary
    printf("Gross monthly remuneration: Rs. %.2f\n", gross_salary);
    return 0;
}
```