**214189E – G.G.P.C. SENARATHNA.**

**Function Exercises.**

01)

#include <stdio.h>  
  
float circleArea(float r); // user-define function.  
int main() { // library function.  
 float Area;  
 Area = circleArea(7);  
 printf("%f", Area);  
}  
float circleArea(float r) {  
 float circleArea = 3.14159 \* r \* r;  
 return circleArea;  
}

02)

#include <stdio.h>  
  
float average(float x,float y,float z,float p,float q); //user-define function.  
int main() { // library function.  
 float ave; // ave means average.  
 ave = average(6,9,4,5,13);  
 printf("%.1f", ave);  
}  
float average(float x,float y,float z,float p,float q) {  
 float average = (x+y+z+p+q)/5;  
 return average;  
}

03)

Method – 01.

#include <stdio.h>  
  
int sum(int x,int y); // user-define function.  
int sub(int x,int y); // "  
int mul(int x,int y); // "  
int div(int x,int y); // "  
int mod(int x,int y); // "  
int main() { // library function.  
 int summation = sum(6,3);  
 printf("%d\n", summation);  
  
 int subtraction = sub(6,3);  
 printf("%d\n", subtraction);  
  
 int multiplication = mul(6,3);  
 printf("%d\n", multiplication);  
  
 int division = div(6,3);  
 printf("%d\n", division);  
  
 int modulus = mod(6,3);  
 printf("%d\n", modulus);  
}  
int sum(int x,int y) {  
 int sum = x + y;  
 return sum;  
}  
int sub(int x,int y) {  
 int sub = x - y;  
 return sub;  
}  
int mul(int x,int y) {  
 int mul = x \* y;  
 return mul;  
}  
int div(int x,int y) {  
 int div = x / y;  
 return div;  
}  
int mod(int x,int y) {  
 int mod = x % y;  
 return mod;  
}

Method – 02.

#include <stdio.h>  
#include <math.h>  
  
float calculate(float x,float y);  
int main() {  
 float n,m,calculation;  
  
 printf("Input the two numbers : ");  
 scanf("%f%f", &n,&m);  
  
 calculation = calculate(n,m);  
 printf("%.4f", calculation);  
}  
float calculate(float x,float y) {  
 char op;  
 printf("Input the operator : ");  
 scanf(" %c", &op);  
  
 float calculate;  
  
 switch(op) {  
 case '+':  
 calculate = x + y;  
 return calculate;  
 case '-':  
 calculate = x - y;  
 return calculate;  
 case '\*':  
 calculate = x \* y;  
 return calculate;  
 case '/':  
 calculate = x / y;  
 return calculate;  
 default:  
 calculate = pow(x,y);  
 return calculate;  
 }  
}