#include<stdio.h>

#include<conio.h>

#include<math.h>

int main(void) {

int choice, i, a, b;

float x, y, result;

clrscr();

do {

printf(“\nSelect your operation (0 to exit):\n”);

printf(“1. Addition\n2. Subtraction\n3. Multiplication\n4. Division\n”);

printf(“5. Square root\n6. X ^ Y\n7. X ^ 2\n8. X ^ 3\n”);

printf(“9. 1 / X\n10. X ^ (1 / Y)\n11. X ^ (1 / 3)\n”);

printf(“12. 10 ^ X\n13. X!\n14. %\n15. log10(x)\n16. Modulus\n”);

printf(“17. Sin(X)\n18. Cos(X)\n19. Tan(X)\n20. Cosec(X)\n”);

printf(“21. Cot(X)\n22. Sec(X)\n”);

printf(“Choice: “);

scanf(“%d”, &choice);

if(choice == 0) exit(0);

switch(choice) {

case 1:

printf(“Enter X: “);

scanf(“%f”, &x);

printf(“\nEnter Y: “);

scanf(“%f”, &y);

result = x + y;

printf(“\nResult: %f”, result);

break;

case 2:

printf(“Enter X: “);

scanf(“%f”, &x);

printf(“\nEnter Y: “);

scanf(“%f”, &y);

result = x – y;

printf(“\nResult: %f”, result);

break;

case 3:

printf(“Enter X: “);

scanf(“%f”, &x);

printf(“\nEnter Y: “);

scanf(“%f”, &y);

result = x \* y;

printf(“\nResult: %f”, result);

break;

case 4:

printf(“Enter X: “);

scanf(“%f”, &x);

printf(“\nEnter Y: “);

scanf(“%f”, &y);

result = x / y;

printf(“\nResult: %f”, result);

break;

case 5:

printf(“Enter X: “);

scanf(“%f”, &x);

result = sqrt(x);

printf(“\nResult: %f”, result);

break;

case 6:

printf(“Enter X: “);

scanf(“%f”, &x);

printf(“\nEnter Y: “);

scanf(“%f”, &y);

result = pow(x, y);

printf(“\nResult: %f”, result);

break;

case 7:

printf(“Enter X: “);

scanf(“%f”, &x);

result = pow(x, 2);

printf(“\nResult: %f”, result);

break;

case 8:

printf(“Enter X: “);

scanf(“%f”, &x);

result = pow(x, 3);

printf(“\nResult: %f”, result);

break;

case 9:

printf(“Enter X: “);

scanf(“%f”, &x);

result = pow(x, -1);

printf(“\nResult: %f”, result);

break;

case 10:

printf(“Enter X: “);

scanf(“%f”, &x);

printf(“\nEnter Y: “);

scanf(“%f”, &y);

result = pow(x, (1/y));

printf(“\nResult: %f”, result);

break;

case 11:

printf(“Enter X: “);

scanf(“%f”, &x);

y = 3;

result = pow(x, (1/y));

printf(“\nResult: %f”, result);

break;

case 12:

printf(“Enter X: “);

scanf(“%f”, &x);

result = pow(10, x);

printf(“\nResult: %f”, result);

break;

case 13:

printf(“Enter X: “);

scanf(“%f”, &x);

result = 1;

for(i = 1; i <= x; i++) {

result = result \* i;

}

printf(“\nResult: %.f”, result);

break;

case 14:

printf(“Enter X: “);

scanf(“%f”, &x);

printf(“\nEnter Y: “);

scanf(“%f”, &y);

result = (x \* y) / 100;

printf(“\nResult: %.2f”, result);

break;

case 15:

printf(“Enter X: “);

scanf(“%f”, &x);

result = log10(x);

printf(“\nResult: %.2f”, result);

break;

case 16:

printf(“Enter X: “);

scanf(“%d”, &a);

printf(“\nEnter Y: “);

scanf(“%d”, &b);

result = a % b;

printf(“\nResult: %d”, result);

break;

case 17:

printf(“Enter X: “);

scanf(“%f”, &x);

result = sin(x \* 3.14159 / 180);

printf(“\nResult: %.2f”, result);

break;

case 18:

printf(“Enter X: “);

scanf(“%f”, &x);

result = cos(x \* 3.14159 / 180);

printf(“\nResult: %.2f”, result);

break;

case 19:

printf(“Enter X: “);

scanf(“%f”, &x);

result = tan(x \* 3.14159 / 180);

printf(“\nResult: %.2f”, result);

break;

case 20:

printf(“Enter X: “);

scanf(“%f”, &x);

result = 1 / (sin(x \* 3.14159 / 180));

printf(“\nResult: %.2f”, result);

break;

case 21:

printf(“Enter X: “);

scanf(“%f”, &x);

result = 1 / tan(x \* 3.14159 / 180);

printf(“\nResult: %.2f”, result);

break;

case 22:

printf(“Enter X: “);

scanf(“%f”, &x);

result = 1 / cos(x \* 3.14159 / 180);

printf(“\nResult: %.2f”, result);

break;

default:

printf(“\nInvalid Choice!”);

}

} while(choice);

getch();

return 0;

}