**TUTORIAL 6 SOLUTIONS**

**Question 1**

#include <stdio.h>

void Highest(int \*a, int \*b, int \*c);

int main()

{

int x, y, z;

printf("Enter 1st number: ");

scanf("%d", &x);

printf("Enter 2nd number: ");

scanf("%d", &y);

printf("Enter 3rd number: ");

scanf("%d", &z);

Highest(&x, &y, &z);

return 0;

}

void Highest(int \*a, int \*b, int \*c)

{

int max;

if (\*a > \*b && \*a > \*c)

{

max = \*a;

}

else if (\*b > \*c && \*b > \*a)

{

max = \*b;

}

else if (\*c > \*a && \*c > \*a)

{

max = \*c;

}

printf("Highest = %d\n", max);

}

**Question 2**

#include <stdio.h>

void Discount(float \*x);

int main()

{

float price;

printf("Enter the item price: $");

scanf("%f", &price);

Discount(&price);

printf("The price of the item after discount is $%.2f\n", price);

return 0;

}

void Discount(float \*x)

{

if (\*x < 10)

{

\*x = \*x \* 0.8;

}

else

{

\*x = \*x \* 0.7;

}

}

**Question 3**

#include <stdio.h>

void Add(double \*x, double \*y);

void Sub(double \*x, double \*y);

void Mult(double \*x, double \*y);

void Div(double \*x, double \*y);

int main()

{

double A, B;

int op;

printf("Enter 1st value: ");

scanf("%lf", &A);

printf("Enter 2nd value: ");

scanf("%lf", &B);

printf("Enter 1 to add, 2 to subtract, 3 to multiply and 4 to divide: ");

scanf("%d", &op);

if (op == 1)

{

Add(&A, &B);

}

else if (op == 2)

{

Sub(&A, &B);

}

else if (op == 3)

{

Mult(&A, &B);

}

else if (op == 4)

{

Div(&A, &B);

}

return 0;

}

void Add(double \*x, double \*y)

{

printf("Addition operation:\n");

printf("%.2f + %.2f = %.2f\n", \*x, \*y, \*x + \*y);

}

void Sub(double \*x, double \*y)

{

printf("Subtraction operation:\n");

printf("%.2f - %.2f = %.2f\n", \*x, \*y, \*x - \*y);

}

void Mult(double \*x, double \*y)

{

printf("Multiplication operation:\n");

printf("%.2f \* %.2f = %.2f\n", \*x, \*y, \*x \* \*y);

}

void Div(double \*x, double \*y)

{

printf("Division operation:\n");

printf("%.2f / %.2f = %.2f\n", \*x, \*y, \*x / \*y);

}

**Question 4**

#include <stdio.h>

void shift(char \*p1, char \*p2, char \*p3, char \*p4, char \*p5);

int main()

{

int n;

char c1,c2,c3,c4,c5;

c1 = 'A';

c2 = 'B';

c3 = 'C';

c4 = 'D';

c5 = 'E';

for (n = 1; n <= 5; n++)

{

shift(&c1, &c2, &c3, &c4, &c5);

printf("%c %c %c %c %c\n", c1, c2, c3, c4, c5);

}

return 0;

}

void shift(char \*p1, char \*p2, char \*p3, char \*p4, char \*p5)

{

char temp=\*p1;

\*p1 = \*p2;

\*p2 = \*p3;

\*p3 = \*p4;

\*p4 = \*p5;

\*p5 = temp;

}