EXERCISE CHAPTER 2

1. Circle the syntax errors in the following program.

a)

```
#include<stdio.h>
main(void)
{
  float no Meters;
  float price;
  float discount, normalPrice, discountPrice;

  printf("Enter number of meters : ");
  scanf("%f', &noMeters);
  printf("Enter price (RM) per meter : ");
  scanf("%f", &price);
  normalPrice = noMeters * price;
  discount = 0.25 * normalPrice;
  discountPrice = normalPrice - discounts;

  printf("The normal price for %.2f meters of cotton cloth is RM %.2f\n" noMeters,
normalPrice);
  printf("The price after discount is RM %.2f/n",
  discountPrice);
  return 0
{
```

b)

```
#include<studio.h>
#define ADULT_PRICE = 10.00
int main()
{
  const CHILD_PRICE = 5.00;
  int noAdult;
  int noChild:
  float totalPrice;
  printf("Enter number of adult :");
  scanf("%d", &noAdult);
  print("Enter number of children :);
  scanf("%d", &noChild);
  totalPrice = noAdult * ADULT_PRICE + NoChild * CHILD_PRICE;
  printf("Total price is RM %.2d/n", totalPrice);
  return 0;
{
```

c)

```
#include(stdio.h)
int main ()
{
  float height;
  float weight; bmi;
  printf("Enter height (meters) : ");
  scanf(“%f’, &height);
  printf("Enter weight (kilograms) : ");
  scanf("%f", weight);
  bmi = weight \ (height * height);
  printf("Your height is %.2f meters and weight is %.2f kg\n"
  height);
  printf("Your body mass index is %.2f\n", &bmi);
  return 0;
}
```

d)

```
#include(stdio.h)
int Main()
{
  int quantity;
  float unitPrice; sellPrice;
  float cost, sales, profit;
  printf("Enter items quantity " : );
  scanf("%f\n", &quantity);
  printf("Enter unit price (RM):");
  scanf("%f" &unitPrice);
  print("Enter selling price (RM):");
  scanf("%f", &sellPrice);
  cost = quantity * unitPrice;
  sales = quantity * sellPrices;
  profit = sales - cost;
  printf("The profit for %d items is RM %.2f\n", quantity profit);
  return 0;
}
```

2. Trace the output from the following program:

a)	int num = 4, count = 6;
	count += 2;
	count++;
	num = count;
	printf("The value of num is %d and the value of count is %d\n", num, ++count);

b)	int num = 2, count = 4;
	++count;
	num = count;
	count -= 2;
	printf("The value of num is %d and the value of count is %d\n", num, count++);

c)	int num = 1, count = 3;
	++count;
	num = count;
	count *= 2;
	count++;
	printf("The value of num is %d and the value of count is %d\n", num, count--);

d)	int num = 3, count = 5;
	++count;
	num = count;
	count /= 2;
	++num;
	printf("The value of num is %d and the value of count is %d\n", num, ++count);

e)	int p=10, q=2, r=4;
	printf("p is %d ", ++p);
	printf("\nq is %d", q);
	printf("\nr is %d", r++);
	r=r++-p;
	printf("\nThe final value of r is %d", r);

f)	int x = 4, y = -5;
	float p = 10.0;
	p += y / 2;
	printf("Value of p is : %.2f\n", p);
	y += x++ * 4 / x;
	printf("Value of y : %d\n", ++y);

g)	int a=1, b=2, c=3;
	float d=2.5;
	printf(“%d %d %d %f”, a,b,c,d);
	a++;
	b+=5;
	d += b/a + --c;
	printf(“%-3d%d%d%5.1f”, a,b,c,d);

h)	int x = 3, y = 5, z = 6;
	x = y++ * 2 - --z + ++x;
	printf("x = %d y = %d z = %d\n", x, y, z);
	z += y++ *3 - x;
	printf("x = %d y = %d z = %d\n", ++x, y--,z++);

i)	int x = 5, y = -7,result;
	x++;
	y--;
	result = x + ++y + x%3 +10;
	printf("%d\n",--x + result);
	result = x+ y;
	y += 2;
	printf (“%d + %d = %d\t Thank you!”,x,y,result);

j)	int p = 5, q = 10; p = q--; printf(“Value p and q respectively is : %d and %d\n”, ++p, q++);
k)	int n = 3, m =4, a = 2, c = 5, z; z = m + (m * n – ++a) % c ; printf(“Value of z is : %d”,z);