Practice Dynamic Memory-Array (31-08-2021)

Q1. Write output of the statements in each section:

a.
```
int *a, *b, *c;
int d=5, e=6, f=7;
a = &d; b = &e; c = &f;
printf ("%d %d %d\n", *a, *b, *c);
b = a;
printf ("%d %d %d\n", *a, *b, *c);
c = b;
printf ("%d %d %d\n", *a, *b, *c);
*b = *c + 10;
printf ("%d %d %d\n", *a, *b, *c);
c = &e;          b = &f;
printf ("%d %d %d\n", *a, *b, *c);
*c = *a + *b;
*b = *a + *c;
printf ("%d %d %d\n", *a, *b, *c);
```

b.
```
int a[]={12,54,78,64,39,76,65,34};
int *b=a, *c=&a[3], i;
for (i=0;i<5;i++, b++)
      printf ("%d ", *b);
printf ("\n");
for (i=0;i<5;i++, c++)
      printf ("%d ", *c);
printf ("\n");
b=&a[2]
for (i=0;i<5;i++)
      printf ("%d ", b[i]);
printf ("\n");
```

c.
```
int a[]={12,54,78,64,39,76,65,34};
int b[]={124,454,678,364,839,976,165,234};
int *c=a, i ;
for (i=0;i<5;i++)
      printf ("%d ", c[i]);
printf ("\n");
c = &b[2];
for (i=0;i<5;i++)
      printf ("%d ", c[i]);
printf ("\n");
```

Q2. Create a dynamic array according to input from user. Initialize it randomly and print values:

Q3. Create two dynamic array of different sizes, according to inputs from user. Initialize them randomly and print their values. Find and print their average. Compare their averages and print, which array has larger average?

Q4. Create two dynamic array of different sizes, according to inputs from user. Initialize them randomly and print their values. Create a third dynamic array of size equal to sum of sizes of first two arrays. Store first array at start of third array. Next, store second array also in third array after the values of first array?