***ARRAY ( EXERCISES - 5.1 )***

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| **1.**  //1803117  #include<stdio.h>  int main(void)  {  int i,count[10];  for(i=0;i<100;i++)  {  printf("Enter a number :\n");  scanf("%d", &count[i]);  }  return 0;  }  \*\*Wrong : Here the size of array is 10 but the loop is run 100 times . | **2.**  Write a program that reads ten numbers entered by user and reports if any of them match .  //1803117  #include<stdio.h>  int main()  {  int i,a[10],j,k;  printf("Input 10 numbers :\n");  for(i=0;i<10;i++)  {  scanf("%d", &a[i]);  }  for(j=0;j<10;j++)  {  for(k=j+1;k<10;k++)  {  if(a[j]==a[k])  {  printf("%d is matched\n",a[j]);  }  }  }  return 0;  } |
| **3.**  //1803117  #include<stdio.h>  int main()  {  float a[100];  int i,j,t,n;  printf("Input a number :\n");  scanf("%d",&n);  printf("Input the elements of array:\n");  for(i=0;i<n;i++)  {  scanf("%f",&a[i]);  }  for(i=0;i<n;i++)  {  for(j=i+1;j<n;j+**+)** | {  if(a[i]>a[j])  {  t=a[i];  a[i]=a[j];  a[j]=t;  }  }  printf("%f\n",a[i]);  }  return 0;  } |

***ARRAY ( EXERCISES - 5.3 )***

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| 1. Write a program that defines a 3x3x3 three –dimensional array and load it with the number 1 to 27 .   //1803117  #include<stdio.h>  int main()  {  int a[3][3][3],i,j,k,f=1;  for(i=0;i<3;i++)  {  for(j=0;j<3;j++)  {  for(k=0;k<3;k++)  {  a[i][j][k]=f;  printf("%4d",a[i][j][k]);  f++;  }  printf("\n");  }  }  return 0;  } | 2 . Display the sum of elements 1 to 27 using 3x3x3 three dimentional array .  //1803117  #include<stdio.h>  int main()  {  int a[3][3][3],i,j,k,f=1,sum=0;;  for(i=0;i<3;i++)  {  for(j=0;j<3;j++)  {  for(k=0;k<3;k++)  {  a[i][j][k]=f;  sum=sum+a[i][j][k];  f++;  }  }  }  printf("Sum of 1 to 27 = %d\n",sum);  return 0;  } |
| **Exercise 5.4**  **3.**  //1803117  #include<stdio.h>  int main()  {  int a[10][3],i,j,k=1,sum=0,c;  for(i=0;i<10;i++)  {  for(j=0;j<3;j++)  {  if(j==0)  a[i][j]=k;  else if(j==1)  a[i][j]=k\*k;  else if(j==2)  a[i][j]=k\*k\*k;  printf("%7d",a[i][j]);  }  printf("\n");  k++;  } | printf("Input a cube numer :\n");  scanf("%d",&c);  for(i=0;i<10;i++)  {  if(c==a[i][2])  {printf("Root = %d\n",a[i][0]);  printf("Root's square = %d\n",a[i][1]);  break;}  }  if(i==10)  {  printf("This cube is not found !\n");  }  return 0;  } |

***ARRAY ( EXERCISES - page-162 )***

***\*\* Write a program that allows the user to enter a list of 20 numbers and then finds and displays the mode .***

//1803117

#include<stdio.h>

int main()

{

int a[20],i,j,m,c,c1;

printf("Enter 20 number :\n");

for(i=0;i<5;i++)

{

scanf("%d",&a[i]);

}

c1=0;

for(i=0;i<20;i++)

{c=1;

for(j=0;j<20;j++)

{

if(a[i]==a[j])

c++;

}

if(c>c1)

{

m=a[i];

c1=c;

}

}

printf("The mode is = %d\n",m);

return 0; }