Name: KEY Id#

ICS 103, Term 093

Computer Programming in C

Quiz# 4

Date: Saturday, August 21, 2010

**Q1.** Determine the output of each of the following programs:

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| #include <stdio.h>  #include <string.h>  #include <ctype.h>  int main() {  char str[]="ICS 103 Quiz#4";  int i=0;  while (str[i] != '\0') {  if ( isdigit(str[i]) ) str[i]='\*';  else str[i]=toupper(str[i]);  i++;  }  puts(str);  return 0;  } | ICS \*\*\* QUIZ#\* |
| #include <stdio.h>  #include <string.h>  int main() {  char orig[100]="Ali Ahmad Ibrahim Khaled";  char updated[100]="", temp[100], \*token;  token=strtok(orig," ");  while (token != NULL) {  strcpy(temp,token);  strcat(temp," ");  strcat(temp,updated);  strcpy(updated,temp);  token=strtok(NULL," ");  }  puts(updated);  return 0;  } | Khaled Ibrahim Ahmad Ali |

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| --- | --- |
| #include <stdio.h>  int main() {  int x[]={100,5,15,25};  int i, j = 1, k, t;  do{  k = 0;  for(i = 0; i < 4-j; i++) {  if (x[i] > x[i+1]) {  t=x[i];  x[i]=x[i+1];  x[i+1]=t;  k = 1;  }  }  j++;  for (int i=0; i<4;i++)  printf("%d ",x[i]);  printf("\n");  } while (k==1 && j < 4);  return 0;  } | 5 15 25 100  5 15 25 100 |
| #include <stdio.h>  int main() {  int x[]={1,5,10,20,32,50};  int s=0, e=5, t=5, m, f=0, w;  while (s <= e && !f) {  m=(s + e)/2;  printf("%d\t%d\t%d\n",s,e,m);  if (x[m] == t) {f=1; w=m;}  else if (x[m] < t) s=m+1;  else e=m-1;  }  if (!f) w=-1;  printf("%d\n",w);  return 0;  } | 0 5 2  0 1 0  1 1 1  1 |