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| ***6.1) [4] . Write a program with a for loop that counts from 0 to 9, displaying the numbers on the screen. Print the numbers using a pointer.***  //1803117  #include<stdio.h>  int main()  {  int c;  int \*p;  for(c=0;c<10;c++)  {  p=&c;  printf("%d\n",\*p);  }  return 0;  } | ***6.3) [3] . Write a program that inputs a string .Have the program look for the first space .If it finds one , print the remainder of the string .***  //1803117  #include<stdio.h>  #include<string.h>  int main()  {  int i;  char ch[1000],\*p;  printf("Please input a string!\n");  gets(ch);  p=ch;  for(i=0;i<strlen(ch);i++)  {  if(\*p && \*p!=' '){  p++;  }  else  {printf("%s",p);  break;}  }  return 0;  } |

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| ***6.4) [1] . Write a program that creats three character pointers and initialize them so that one points to the string “one” ,the second to the string “two” and third to the “three” .print all six permutations of three strings .***  //1803117  #include<stdio.h>  #include<string.h>  int main(void)  {  char \*p="one",\*q="two",\*r="three";  printf("%s %s %s\n",p,q,r);  printf("%s %s %s\n",p,r,q);  printf("%s %s %s\n",q,p,r);  printf("%s %s %s\n",q,r,p);  printf("%s %s %s\n",r,p,q);  printf("%s %s %s\n",r,q,p);  return 0;  } | ***6.5) [1] . In this exercise , you will create an “executive decision aid ”. This is a program that answer yes, no, maybe to a question entered at the keyboard . To create this program use an array of character pointers and initialize them to point to these three strings : “Yes”,”No”,”Maybe. Rephrase the question” .Next ,use this formula to compute an index into the pointer array : index = length % 3.***  //1803117  #include<stdio.h>  #include<string.h>  int main()  {  char \*p[3]={"Yes","No","Maybe. Rephrase the question"},ch[1000];  printf("Input a question :\n");  gets(ch);  printf("%s\n",p[strlen(ch)%3]);  return 0;  } |

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| ***6.6) [1]. Write a program that assign an integer a value using a pointer to a pointer .Before the program ends , display the addresses of the integer variable , the pointer , and the pointer to pointer .( use %p to display a pointer value )***  //1803117  #include<stdio.h>  int main()  {  int a,\*p,\*\*pi;  printf("Enter an integer :\n");  scanf("%d",&a);  p=&a;  pi=&p;  printf("%p %p %p\n",p,\*p,\*\*pi);  return 0;  } | ***6.7) [1] . Write your own version of strcat() called mystrcat() ,and write a short program that demonstrates it .***  //1803117  #include<stdio.h>  #include<string.h>  void mystrcat(int l,int m,char \*a,char \*b);  int main()  {  int l,m;  char c[100],d[100],e[100];  printf("Enter first part:\n");  gets(d);  l=strlen(d);  printf("Enter Second part:\n");  gets(e);  m=strlen(e);  mystrcat(l,m,d,e);  puts(d);  return 0;  }  void mystrcat(int l,int m,char \*a,char \*b)  {  int i;  for(i=1;i<=l;i++)  {  a++;  }  for(i=l+1;i<=m+l+1;i++)  {  if(i==l+1)  \*a++=' ';  else  \*a++=\*b++;  }  \*a='\0';  } | |
| ***6.7)[2] . Write a program that passes a pointer to an integer variable to a function .Inside that function , assign the variable the value -1 .After the function has returned , demonstrate that the variable does , indeed ,contain -1 by printing its value .***  //1803117  #include<stdio.h>  int fun(int \*pi);  int main()  { | int n;  printf("Enter an integer :\n");  scanf("%d",&n);  fun(&n);  printf("%d\n",n);  return 0;  }  int fun(int \*pi)  {  \*pi=-1;  return \*pi;  } | |
| ***Mastery Skill Check)page-193) 2). Write a program that assigns a value to a variable indirectly by using a pointer to that variable.***  //1803117  #include<stdio.h>  int main()  {  int n,\*pi;  pi=&n;  printf("Enter a integer value :\n");  scanf("%d",pi);  printf("%d\n",n);  return 0;  } | ***Cumulative Skills Check page 194 :***  ***2. Write a program that counts the number of spaces in a sting using pointer arithmetic rather than array indexing .***  //1803117  #include<stdio.h>  #include<string.h>  int main()  {  char str[80],\*p;  int i,spaces;  printf("Enter a string :\n");  gets(str);  p=str;  spaces=0;  for(i=0;\*p;i++)  {  if(\*p==' ')  spaces++;  p++;  }  printf("Number of spaces = %d\n",spaces);  return 0;  } |