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#include<stdio.h>

int s(int x)
{
    return x*x;
}

int c(int p)
{
    return p*p*p;
}

void main()
{
    int x,ans;
    int (*p)(int);

    char ch;
    x=5;
    printf("enter choice s,c");
    scanf("%c",&ch);

    //pointing and calling function as per condition

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    if(ch=='s')
    {
        p=s;
        ans=p(x);
        printf("%d",ans);
    }

    else if(ch=='c')
    {
        p=c;
        ans=p(x);
        printf("%d",ans);
    }
}

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#include<stdio.h>

// Note our user-defined comparison is the third parameter
void SelectionSort(int arr[], int nSize, int (*pComparison)(int,int))
{
    int t;
    for (int i= 0; i <nSize-1; i++)
    {
        // Search through every element starting at nStartIndex+1
        for (int j = i+ 1; j <nSize; j++)
        {
            // Note that we are using the user-defined comparison here
            if (pComparison(arr[i], arr[j])) // COMPARISON DONE HERE
            {
                t=arr[i];
                arr[i]=arr[j];
                arr[j]=t;
            }
        }
    }
}

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    }
    }
}

// Here is a comparison function that sorts in ascending order
// (Note: it's exactly the same as the previous Ascending() function)
int Ascending(int nX, int nY)
{
    return nX>nY;
}

// Here is a comparison function that sorts in descending order
int Descending(int nX, int nY)
{
    return nX<nY;
}

// This function prints out the values in the array
void PrintArray(int pArray[], int nSize)
{
    for (int iii=0; iii <nSize; iii++)
        printf("\n%d", pArray[iii] );
}

int main()
{
    int arr[9] = { 3, 7, 9, 5, 6, 1, 8, 2, 4 };

    // Sort the array in descending order using the Descending() function
    //SelectionSort(arr, 9, Descending);
    //PrintArray(arr, 9);

    // Sort the array in ascending order using the Ascending() function
    SelectionSort(arr, 9, Ascending);
    PrintArray(arr, 9);

    return 0;
}

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#include<stdio.h>

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void Sqr(int x)

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{
    printf("%d",X*X);
}

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void cube(int x)

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{
    printf("\n%d",X*X);
}

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void increase(int x)
{
    printf("\n%d",++x);
}

int main()
{ void (*ptr[3])(); // ptr is an array of pointer to a function accepts integer and returns nothing
  ptr[0]=Sqr;
  ptr[1]=cube;
  ptr[2]=increase;
  for(int i=0;i<3;i++)
  { ptr[i]();
  }
  return 0;
}

void main( )
{ int i;
void fun1( ), fun2( ), fun3( );
  int (*f[3])( );
  f[0]=fun1; f[1]=fun2; f[2]=fun3;
  for(i=0;i<3;i++)
  (*f[i]) ( );
}

fun1( ) { printf("USM"); }
fun2( ) { printf("COMPUTER"); }
fun3( ) { printf("EDUCATION"); }

```

what will be the output

- 1) USM COMPUTER EDUCATION
- 2) USM COMPUTER
- 3) USM COMPUTERCOMPUTEREDUCATION
- 4) Error

