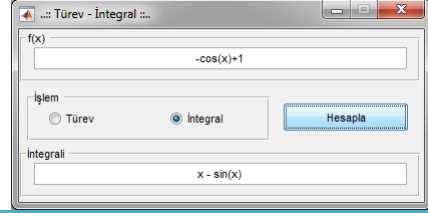
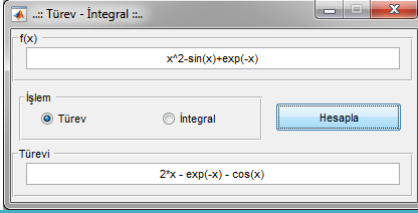


## Cevaplar

## Uygulama - 1

Örnek ekran görüntülerinden bazıları aşağıda verilen "Türev-Integral" hesaplama uygulamasını tasarlayınız.



```
function pushbutton1_Callback(hObject, eventdata, handles)
```

```
sym x
fx=sym(get(handles.edit1,'String'));
if (get(handles.radiobutton1,'Value')==1)
    f=diff(fx);
else
    f=int(fx);
end;
set(handles.edit2,'String',char(f));
```

```
function uibuttongroup1_SelectionChangedFcn(hObject, eventdata, handles)
```

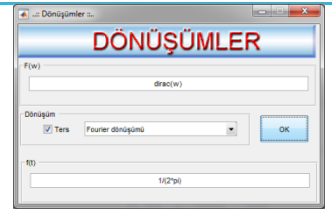
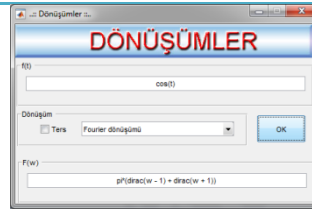
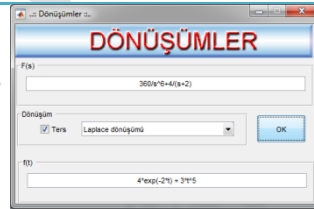
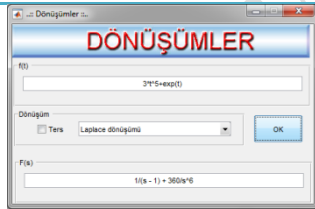
```
if (get(handles.radiobutton1,'Value')==1)
    set(handles.uipanel2,'Title','Türevi');
else
    set(handles.uipanel2,'Title','Integrali');
end
```

## Uygulama - 2

Örnek ekran görüntülerinden bazıları aşağıda verilen "Dönüşüm" simülatorü uygulamasını tasarlayınız.

Notlar:

- Simülatorde seçenek olarak "Laplace dönüşümü", "z dönüşümü" ve "Fourier dönüşümü" ile bunların ters dönüşümleri yer almaktadır.
- Seçime/işleme göre ilgili panellerin başlıkları uygun olarak değişmektedir.



```
function h4_lab2_OpeningFcn(hObject, eventdata, handles, varargin)
```

```
r=imread('resim','jpg'); axes(handles.axes1); imshow(r);
```

Onay kutucuğu ve menüye

```
if (get(handles.popupmenu1,'Value')==1)
    if (get(handles.checkbox1,'Value')==1)
        set(handles.uipanel1,'Title','F(s)');set(handles.uipanel13,'Title','f(t)');
    else
        set(handles.uipanel1,'Title','f(t)');set(handles.uipanel13,'Title','F(s)');
    end
elseif (get(handles.popupmenu1,'Value')==2)
    if (get(handles.checkbox1,'Value')==1)
        set(handles.uipanel1,'Title','F(z)');set(handles.uipanel13,'Title','f[n]');
    else
        set(handles.uipanel1,'Title','f[n]');set(handles.uipanel13,'Title','F(z)');
```

```

end
else
if (get(handles.checkbox1,'Value')==1)
set(handles.uipanel1,'Title','F(w)');set(handles.uipanel3,'Title','f(t)');
else
set(handles.uipanel1,'Title','f(t)');set(handles.uipanel3,'Title','F(w)');
end
end;

function pushbutton1_Callback(hObject, eventdata, handles)

syms t s n z w
f1=sym(get(handles.edit1,'String'));
if (get(handles.popupmenu1,'Value')==1)
if (get(handles.checkbox1,'Value')==1)
f2=ilaplace(f1);
else
f2=laplace(f1);
end
elseif (get(handles.popupmenu1,'Value')==2)
if (get(handles.checkbox1,'Value')==1)
f2=iztrans(f1);
else
f2=ztrans(f1);
end
else
if (get(handles.checkbox1,'Value')==1)
f2=ifourier(f1);
else
f2=fourier(f1);
end
end;
set(handles.edit2,'String',char(f2));

```

*Başarılar dilerim...*

*Doç. Dr. Fahri Oatansever*